DOCUMENT RESUME

ED 277 805 UD 025 291

AUTHOR Feld, Marcia Marker; And Others
TITLE The Stamford Public Education Facilities Utilization Plan. Stamford Educational Public Policy Impact Study. Volume IV.
INSTITUTION Stamford Public Schools, Conn.
PUB DATE 83
NOTE 177p.; For volumes 1-3 of this study, see UD 025 288-290.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC08 Plus Postage.
DESCRIPTORS *Educational Facilities; Educational Facilities Planning; *Educational Policy; Elementary Secondary Education; *Facility Utilization Research; Government Role; Government School Relationship; *Public Education; *Public Policy; School Desegregation; Urban Education
IDENTIFIERS *Connecticut (Stamford)

ABSTRACT

In the last decade, Stamford has been transformed from a suburban town to an urban center of national renown. A responsive yet directive public school system is critical in preserving a feeling of community. The Stanford Educational Planning Committee, a team of interdisciplinary professionals and a broad-based community group, examined trends in the environment and their effect upon public education in Stamford, and proposed policy changes. Trends identified include changes from construction of single-family homes to apartment building, an increase in corporate offices, and erosion of support for education despite a sound fiscal base. This last volume of the committee's four-part report contains recommendations regarding the physical facilities of the Stamford public schools and a description of the methods used to develop the Stamford Facilities Utilization Plan, designed to create a desegregated, cost-effective, quality educational system. This plan was developed through a five-step process: (1) determination of projected demand for services; (2) determination of projected supply of services; (3) analysis of supply versus demand; (4) comparative analysis of schools; and (5) development of policy options. The report concludes with recommendations in the areas of curriculum development and policy options for strengthening and phasing out of facilities. Numerous tables and figures supplement the text. An appendix provides a list of the study working papers. (LHW)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

F2281

ED277805

STAMFORD EDUCATIONAL PUBLIC POLICY IMPACT STUDY

VOLUME IV

The Stamford Public Education Facilities Utilization Plan

Stamford Public Schools

1983

UD025291

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Dr. Maria M. Fehl
ANALYTICS

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

BEST COPY AVAILABLE

STAMFORD EDUCATIONAL PLANNING COMMITTEE

1981 - 1982

Heather Alexander	Newfield School
John Anderson	Urban League of Southwest Connecticut
Scottie Annable	Community
Jill Beaudry	Community
Louise Berkman	Community
Gloria Biliunas	CONOCO
T. Blackshear	Community
James Bonner	Chairman, Taxpayers Association of Stamford
Marilyn Bonoff	Community
Cynthia Bowser	Southfield Community Organization
Otto Calder (Chairman)	Community
Virginia Campbell	Community
Jennifer Carr	Community
Stan Cooper	Community
Mary Corcoran	Family and Children's Services
Robert B. Davies	Stamford Education Association
Maria De Jesus Solis	Children's Creative Workshop - Ryles School
Robert M. Frangione	Stamford Education Association
Barbara Friedman	League of Women Voters
Woodrow Glover	Town Hall
Rose Marie Grasso	Community
Jack Heffrenan	G.T.E.
Lani Hoch	Community
Rev. Mel Hoover	Council of Churches and Synagogues
Ellen Isidro	Parent
Sandy Kinseley	Community
Pamela Koprowski	Champion, International
Jennifer Lapine	National Council of Jewish Women
Ted Lewis	Chairman, Planning Board
Roselyn Mangot	Community
Barbara McCarty	Community
Sandra Melzer	Westhill High School
Maria Nakian	Community
Roslyn Nesin	Community
Alan R. Neilsen	Pitney Bowes, Inc.
Margaret Nolan	Board of Finance

STAMFORD EDUCATIONAL PLANNING COMMITTEE - CONTINUED

Carmella Piacentini	Olin Corporation
William Pickens	Vice President, Union Trust
Marianne Pollack	Stamford Economic Assistance Corporation
Jean V. Ranhosky	National Council of Senior Citizens
Carmen Rivera	Director, Hispanic Center
Dr. Charles Robinson	Stamford Administrative Unit
Judy Rodwin	Community
Marie M. Romero	BUTP - Stamford High School
Barbara Sachs	Community
Joan Sandow	Community
Christine Schoen	League of Women Voters
Sandra Schlachtmeyer	Community
Helen Seifert	Century 21 Realty
Rev. William Sexton	Council of Churches
Flora Smithline	Community
Nell Taylor	Continental Group, Inc.
Marilyn Timbers	Riverbank School
Dotty Vlamis	Community
Pam Yardis	Community

STAMFORD PUBLIC SCHOOLS

Dr. Jerome B. Jones	Superintendent of Schools
Dr. Norman Walsh	Assistant Superintendent for Research and Development
Mr. Alan Grafton	Assistant Superintendent

STAMFORD BOARD OF EDUCATION

S.A. Signore	President
Ellen P. Camhi	Vice President

STAMFORD EDUCATIONAL PUBLIC POLICY IMPACT STUDY

FACILITIES UTILIZATION PLAN STAFF

Dr. Marcia Marker Feld	Study Director
Ms. Joanne Cassulo	Planner
Mr. Edward Feinman	Fiscal Policy Analyst
Mr. David Winsor	Education Policy Facilities Planner
Ms. Gloria Abrams	Research Associate
Ms. Jean Devine	Research Assistant
Ms. Deborah Kupa	Research Assistant
Ms. Eileen Cook	Secretary

TABLE OF CONTENTS

VOLUME IV

List of Illustrations vii

List of Tables. viii

Preface xii

Introduction. xv

Chapter I: OVERVIEW OF FACILITIES STUDY

The Facilities Utilization Plan 1
The Planning Process of the Facilities Study. 2

Chapter II: DEMAND FOR SCHOOLING

Projections 3
  Cohort Survival Model 3
  Occupancy Model Verification. 7

Chapter III: PLANNING STRATEGIES

Needs Assessment: A Supply and Demand Comparison 18
Private School Enrollment: Its Impact Upon the Stamford Public
  School System 24
The Demand for Schooling in Stamford. 28
Needs Analysis. 39
Findings. 41
Summary 55

Chapter IV: FACILITIES UTILIZATION STRATEGIES

Educational Goals and Policy Assumptions. 64
Criteria for Decision Making. 65
Demographic Analysis. 66
Facilities Analysis 68
  Evaluation Criteria 70
Fiscal Analysis 78
  Descriptive Indicators Used 80
  Cost Indicators Used. 80
  Summative Indicators Used 85
  Analysis. 86
Social Trends 89
Summary 91

TABLE OF CONTENTS - CONTINUED

Chapter V: POLICY RECOMMENDATIONS

Demand, Supply, and the Needs Assessment. 98
Findings. 100
Curriculum Development. 100
Policy Options for Strengthening and Phasing Out of Facilities. 103
Summary: Policy Options. 106

APPENDIX

Appendix A: Working Papers for Stamford Educational Public Policy Impact Study. 109

LIST OF ILLUSTRATIONS

Figures

i-One	Analysis: Identification of Critical Public Policy Impact Elements.	xxi
II-One	Comparison of School Age Population Projections for Stamford, 1990 and 2000	13
II-Two	Comparison of School Age Population Projections by Neighborhood for 1990.	14
II-Three	Comparison of School Age Population Projections by Neighborhood for 2000.	15
II-Four	Comparison of Elementary School Age Population Projections by Neighborhood, 1990	16
III-One	Proportion of Private School Students in Total Stamford School Age Population, Grades K-12, 1970-1981	25
III-Two	Map of Stamford Indicating Percent Minority Projected in School Age Population (5-19 Year-Olds) for 1990	36

LIST OF TABLES

i-One	Study Components.	xxii
II-One	Forecast of Population, Citywide and by Neighborhood, with Percent Change for Years 1970, 1980, 1990, and 2000.	5
II-Two	Neighborhood Ranking of Percent Change in Population Trends for 1980-2000.	6
II-Three	School Age Population (5-17) Projections by Cohort Model, 1990-2000.	9
II-Four	Projection of Target Age Groups by Occupancy Model, 1990-2000	12
III-One	Stamford Public School Enrollment by Race, 1977-78 to 1981-82.	19
III-Two	Stamford Public School Enrollment by Race - Elementary Schools, 1977-78 to 1981-82.	21
III-Three	Stamford Public School Enrollment by Race - Middle Schools, 1977-78 to 1981-82.	22
III-Four	Stamford Public School Enrollment by Race - High Schools, 1977-78 to 1981-82.	23
III-Five	Enrollment of Stamford Students in Public and Private Schools, Grades K-12, 1970 to 1980.	26
III-Six	Enrollment of Stamford Students in Public and Private Schools, 1980-1981.	27
III-Seven	Percent of Stamford School Age Students Attending Private School by Grade Level Organization, by Neighborhood, and Citywide, 1981-1982	29
III-Eight	Comparison of School Age Population in Public and Private School, 1981-1982	30
III-Nine	Percent Change in School Age Population (using 5-14 Year-Old Cohort Model) by Neighborhood Between 1990 and 2000	32

LIST OF TABLES - CONTINUED

III-Ten	Percent of School Age Population of Total Population in 1980 by Neighborhood Study Area by Number, Percent, and Rank.	33
III-Eleven	School Age Population by Race and by Age, 1980	35
III-Twelve	Comparison of Percent Minority in the 5-19 School Age Population with the Percent Minority in 5-17 School Age Population for 1980	37
III-Thirteen	Percent of School Age Population Attending Public Elementary and Middle Schools, 1980	38
III-Fouteeen	Percent of School Age Population Attending Public High Schools, 1980.	40
III-Fifteen	Projected School Enrollment, 1990 and 2000 . .	43
III-Sixteen	Needs Analysis by Neighborhood Based on Assumption One (Elementary Level)	44
III-Seventeen	Needs Analysis by Neighborhood Based on Assumption One (Middle School Level)	46
III-Eighteen	Needs Analysis by Neighborhood Based on Assumption One (High School Level)	47
III-Nineteen	Needs Analysis by Neighborhood Based on Assumption Two (Elementary Level).	50
III-Twenty	Needs Analysis by Neighborhood Based on Assumption Two (Middle School Level)	52
III-Twenty-One	Needs Analysis by Neighborhood Based on Assumption Two (High School Level)	53
III-Twenty-Two	Needs Analysis by Neighborhood Based on Assumption Three (Elementary Level).	56
III-Twenty-Three	Needs Analysis by Neighborhood Based on Assumption Three (Middle School Level)	58
III-Twenty-Four	Needs Analysis by Neighborhood Based on Assumption Three (High School Level)	59

LIST OF TABLES - CONTINUED

III-Twenty-Five	Neighborhood Study Areas Ranked by Forecasted Order of Need for Elementary School Facilities Based on Assumption One.	61
III-Twenty-Six	Neighborhood Study Areas Ranked by Forecasted Order of Need for Elementary School Facilities Based on Assumption Two.	62
III-Twenty-Seven	Neighborhood Study Areas Ranked by Forecasted Order of Need for Elementary School Facilities Based on Assumption Three.	63
IV-One	Basic Facilities Data.	69
IV-Two	Evaluative Criteria for Facilities Analysis	71
IV-Three	Facilities Decision Matrix, Parts I and II . .	73
IV-Four	Basic Organizational Parameters for the Elementary Schools in Stamford	77
IV-Five	Summary of Comparative Models (Elementary Level)	79
IV-Six	Indicative Potential Savings of Annual Costs if Elementary School Buildings Are Closed. . .	81
IV-Seven	Indicative Potential Savings of Annual Costs if Middle School Buildings Are Closed.	83
IV-Eight	Indicative Potential Savings of Annual Costs if High School Buildings Are Closed.	84
IV-Nine	Comparative Costs of Operating the Belltown, Burdick, and Rippowam School Buildings	87
IV-Ten	Selected Indicators Ranked by Neighborhood, 1980	90
IV-Eleven	Decision Criteria for Policy Analysis, Elementary Schools	92

LIST OF TABLES - CONTINUED

IV-Twelve	Decision Criteria for Policy Analysis, Middle Schools.	94
IV-Thirteen	Decision Criteria for Policy Analysis, High Schools.	95

PREFACE

Unlike any community of comparable size in New England, Stamford, Connecticut has undergone vast changes in the past two decades. These changes, which have occurred in the urban systems[1] which comprise the context of the planning of its public school system, have begun and will continue to alter the character of the Stamford Public Schools.

A goal of the Stamford Public Schools is to maximize cost-effective, desegregated, quality education in an optimum learning environment while providing for change with a minimum of disruption for students. In order to attain that goal, this study was requested by the Superintendent of Schools, Dr. Jerome B. Jones, and the Stamford Educational Planning Committee to provide complementary information to their own studies. It is an assessment of the changes in the social and physical policy environment affecting Stamford and the implications of these changes upon the future of public education in the city. Initiated in January 1982, it was completed in December of that year.

The four volumes which present the results of this study document the impact of the future direction of policy trends upon the educational programs and services of the Stamford Public Schools. They must be read in context with the subcommittee reports of the Educational Planning Committee. It is our expectation that these studies will enable the informal dialogue necessary for making educated decisions regarding the future of Stamford's public school system to

---

[1]The urban systems in the physical policy environment are land use, housing, open space, transportation, and infrastructure. In the social and economic policy environment they are population, social indicators, the economic structure including labor market and the changing structure of jobs, and fiscal analysis.

take place.

Several social and physical policy trends which structure the school system have been highlighted by this comprehensive policy analysis:

- A shift in the fundamental structure of the American economy of which a revitalized Stamford has been a leading indicator
- A transformation from a town which encompasses a series of neighborhoods to an urban community with a wide range of living styles and a potential for a vibrant urban life
- A sudden spurt of urban planning problems, e.g., a shift in land use to corporate office space; a change in residential construction to multi-family dwellings, primarily condominiums; a tight, expensive housing market; a dramatic increase in commuters into the city; a switch in retail trade from local to regional shopping which lead to a new visual profile - exciting, but congested
- A sound municipal fiscal base, but with an erosion of public support for education

In concert with these contextual trends, there have been significant changes in the policies which frame this city. Fundamental shifts in land use and its concurrent shifts in the economic and residential structure are buttresses by municipal planning and zoning policies as well as key decisions by the private sector. Advances in educational technology and basic changes in federal and state roles in education, and a spurt in the growth of private schools, are some of the policies which impact upon the future of public education. These changes in policy have also been documented in the study and have been examined for their impact on public education through a series of scenario analyses. Stamford is changing and this change can be an exciting opportunity for planning and directing the future of the schools.

In response to these changes, the major policy question becomes, "What are the priorities that the Stamford Public Schools should address in revising its educational thrust to meet the demands of the year 2000?" The answer to this issue will enable the Stamford Public Schools to move forward in a policy directed fashion, to prepare its citizens to be functioning adults in the American economy in the year 2000, and to remain an educational leader in the nation.

The Study Team would like to extend its appreciation to Dr. Jerome B. Jones, Superintendent of Schools; Dr. Norman Walsh, Assistant Superintendent for Research and Development; Mr. Alan Grafton, Assistant Superintendent; and their administrative staffs. Most particularly, we want to thank the members of the Stamford Educational Planning Committee for their assistance in a close working relationship. I would also like to gratefully acknowledge the commitment and work of the Study Team, and especially the research staff: Ms. Betsy Fobert, Chief Planner; Ms. Doris Minor; Ms. Lia Vasconcelos; Ms. Joanne Cassulo; Ms. Deborah Kupa; Ms. Linda Louro; Ms. Jeanne Devine; and Ms. Gloria Abrams.

Marcia Marker Feld, Ph.D.

Study Director

INTRODUCTION

The future of the Stamford Public Schools must be both responsive and directive; responsive to the needs and wishes of the community and directive in leading students toward the goals of effective citizens, consumers, and workers. This is a time of transition for the Stamford Public Schools, a time to chart a new course as a response to new challenges.

This report is an outcome of an intensive year long study by a team of interdisciplinary professionals and a broad-based community group, the Stamford Educational Planning Committee. The team's goal was to examine trends and proposed policy changes in the environment and to ascertain their effect upon public education in Stamford. During the course of this study, meetings were held with hundreds of individuals - parents, teachers, students, community leaders, businessmen, and public and private sector managers - and mail surveys with follow-up interviews were conducted. In addition, the professional/community team met monthly to discuss the findings and their implications.

Over the past twenty years many changes have occurred in the social, economic, and physical environment in Stamford. The transformation from a town into an urban community has brought a shift in land use to corporate office space; an increase in the construction of multifamily dwellings, primarily condominiums; a tight, expensive housing market; a dramatic increase in commuters into the city; a switch in retail trade from local to regional shopping; and the erosion of public support for education.

Trends in the national economy have also impacted the city. The new thrust of the American economy is complex and, as yet, not fully understood by economists,

sociologists, and planners. However, some startling indicators have emerged: there is strong unemployment among blue collar workers and less unemployment in finance, technology, management, and information transfer. There are significant changes in family patterns, with a shift from the extended family to the nuclear family, and now to single-parent families.

This comprehensive planning and policy study explores these major changes and their impact on the future of the city's school system. Its results are a sense of direction for the community and the schools, an identification of the specified target populations for future school enrollment, and some indication of policy options for the public schools. The next step, to be undertaken by the Stamford Public Schools, will be the development of curriculum and programs which respond to these trends.

Yet, it is essential that the recommendations developed for 1990 and the year 2000 be monitored, reevaluated, and revised as new information develops and new initiatives are completed.

Policy Framework

Educational goals and policy assumptions provided the policy framework for the study. In its development the professional/community team utilized the values, goals, and aspirations of the school system, its Board, its staff, its students, and the larger community as its criteria. The educational goals and policy assumptions which follow were identified initially in meetings with the Stamford Educational Planning Committee, members of the Stamford Board of Education, Stamford teachers, administrators, parents, and community members. They were then examined and revised after a review of the Stamford School System Planning Reports for the last five years. Finally, they were documented at meetings held in September and October 1982, through the subcommittee reports of the Educational Planning Committee presented in October, and in a presentation to

the Board of Education.

The educational goals are to maximize cost-effective, desegregated, quality education in an optimum learning environment and to prepare students to function successfully as citizens, family members, parents, workers, and consumers. The policy assumptions are:

- reasonable and equitable racial balance
- academic balance and feeder pattern continuity
- student access to appropriate educational programs
- safe, sound, and environmentally fit facilities
- adequate space and resources for advanced curriculum
- provision of orderly and timely reduction of surplus capacity
- maximization of quality educational experience
- provision of services to meet the needs of all students in the school system, reduction of out-of-school placements
- minimization of student disruption by continuity through the grades in the same school
- minimization of social/neighborhood disruption
- preservation of neighborhood orientation
- provision of equitable distribution and cost efficient transportation

The framing of these goals and objectives is based upon the understanding that the school system serves a diverse population. Educational programming should maximize benefits resulting from this population by bringing students together in a learning process which includes a focus on post-secondary employment, technical and trade schools, and college and professional schools.

Not all of these policy assumptions can be met equally. For example, the policy assumption that neighborhood orientation should be preserved may be in-

compatible with criteria of academic balance and feeder pattern continuity. The largest number of minority students do not reside near the newer and structurally flexible facility. These students are located in only a few of the study neighborhoods. Despite this situation, the assumptions can be implemented as part of school policy once discussion of the pros and cons of each, and the trade-offs involved in the implementation of each have taken place.

However, some of the policy assumptions, if agreed upon, will not conflict. For example, the commitment to student access to an appropriate educational program and the need for a safe, sound, and environmentally fit facility can be paired with providing for an orderly and timely reduction of surplus capacity.

While these assumptions are complex, it is time for decisions to be made. Stamford is in a transition phase and needs leadership to determine the direction of its schools and to build upon the system's strong elements - the programs that are working, the appropriate curriculum, the special school programs, and the commitment of its teachers, administrators, students, and parents. This will enable Stamford to meet its goal of maximizing cost-effective, desegregated, quality education in an optimum learning environment while providing for change with a minimum of disruption for students.

The Study Team's planning and policy process designed to accomplish the goals and objectives of this study is based upon the concept of the role of the school in the community; the supportive nature and the influence that each has upon the other. The school is often an anchor for the community, providing a central focus and stability in the environment. It is a symbol of local governance in New England as well as that of neighboring areas, and is, in fact, central to the growth and learning of children and their families. The school has played these roles in the historical development of this country. It is the mechanism by which local and national social policy has been implemented -

whether that policy be for a literate people, for an industrializing new republic, or an integrated society for a stable democracy. Most importantly, the school, its staff, and the parents provide the learning environment for the students.

Concurrent with this concept of the role of the school in the Study Team's approach is the sense that education policy planning, to be useful, must be comprehensive in scope and focus on a multiplicity of issues and information, all within the context of the educational system's response to the needs of the students. The key concept underlying this approach lies in the understanding of the interrelationships of elements within the policy environment which comprise a community: population, land use, economic structure, housing, transportation, fiscal structure, and physical infrastructure. All of which are constrained by governmental structure and by the policies and behavior of the private sector.

The approach in the Public Policy Impact Study has been to utilize a number of different planning techniques including goals analysis, needs assessment, fiscal consequences, and scenario analysis. The key to this process is its iterative nature; that is, once the criteria for the decision are established, the process is repeated and each criterion or decision factor is further refined. At some point in the process, some decision weights were given to the policy assumptions which are stated by the Stamford School Board, the Educational Planning Committee, and the community.

In this study, the trends and proposed policy changes in the environment were examined to ascertain their effect upon public education in Stamford. An assessment of these changes utilizes as its criteria the values, goals, and aspirations of the school system, its Board, staff, and students, along with the larger community.

Included in the activities undertaken to complete this study are:

- an examination of educational policy trends and their implications for Stamford
- an assessment of the city's Master Plan and its amendments through an examination of its holding capacity study to gauge the impact of its policies upon the school system
- a housing market analysis which studied the re-use potential of the current housing stock to identify areas where upgrading of zoning may increase or decrease the total population
- a determination of the cost of housing for renters and owners
- an examination of the labor markets operating in Stamford for their effect upon the school system in terms of their dependent impact upon the housing market and the municipal finance system as well as their impact upon educational programs, services, and facilities
- an evaluation of the municipal fiscal environment in the city by comparing the relative cost of educating students in Stamford to other municipal services, by measuring the amounts expended on education in Stamford against other cities and towns, and by assessing the quality of educational outcomes (see Figure i-One)
- a forecast of the demand for public educational services needed to prepare Stamford students to function successfully in the work force
- an assessment of the school system's present strengths, weaknesses, and problems

Phases of the Study

As indicated in Table i-One, this comprehensive policy and planning study is comprised of two phases, each with three stages. In Phase One, Impact Analysis, three activities were completed. During Stage One, data was collected on the

Figure i-One

Analysis

Identification of Critical Public Policy Impact Elements

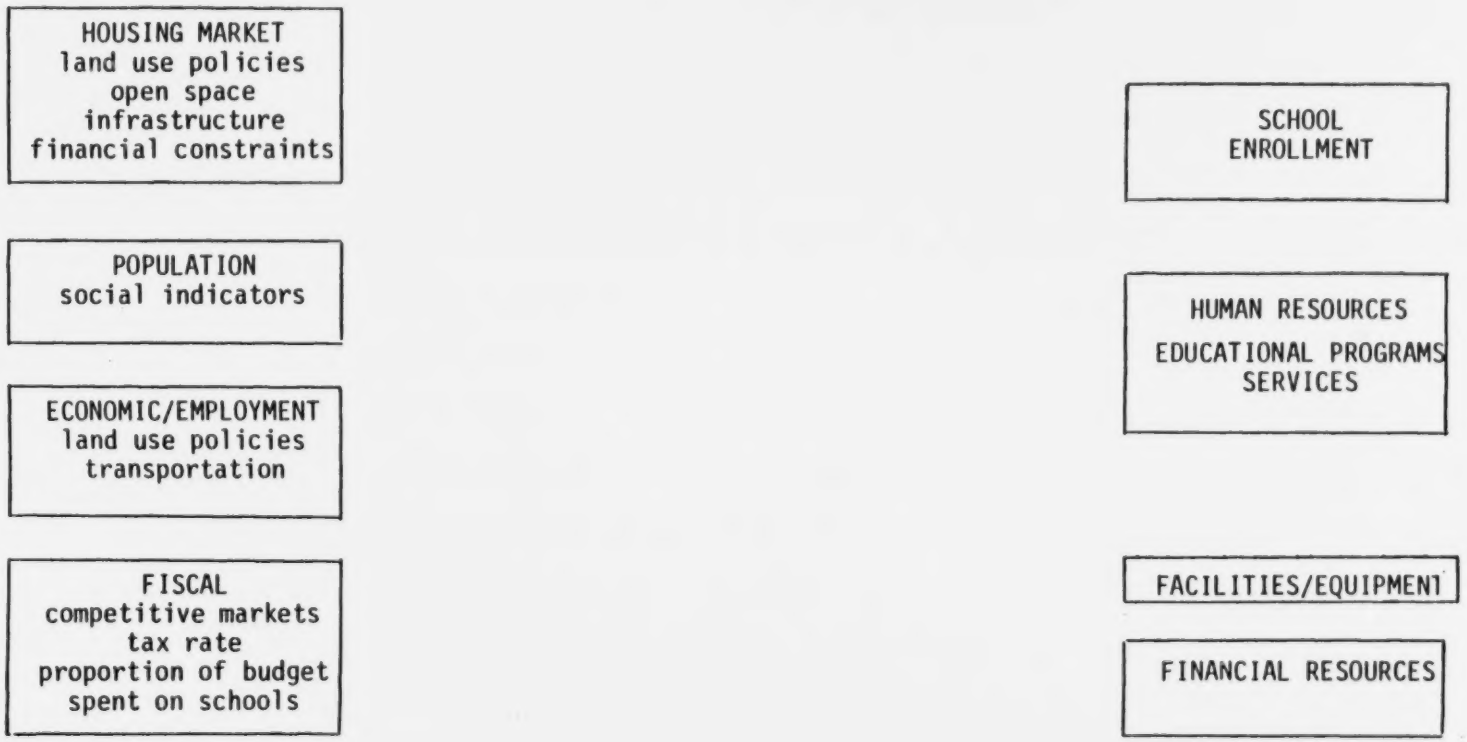


Table i-One
Study Components

PHASE ONE: IMPACT ANALYSIS			PHASE TWO: SCENARIO ANALYSIS		
Stage One	Stage Two	Stage Three	Stage One	Stage Two	Stage Three
Issue Analysis, Data Collection, Analysis and Projection	Policy Assessment	Discrepancy Analysis	Intensive Impact/ Issue Analysis	Scenario Analysis	Final Report
- Population - Social data - Land use - Housing - Open lands - Transportation - Environment - Economic - Labor market - Occupation - Fiscal	- Assess educational policy trends - Public vs. private schools - Role of federal government - Role of state - City of Stamford Master Plan and Amendments - Zoning and subdivision codes - STEP	- Forecast the demand by stratified characteristics for educational services - Coordinate with Educational Committee study of community values, aspirations, and ideals about education	- Assess school system's present strengths, weaknesses, and problems in light of demand projections - Develop a social indicator model to assist in the identification of student needs	- Forecast and analyze the impact of the trends in Phase I on the future of public education - Assess the impact on enrollment, education program and services, fiscal resources, facilities, and relationships with other agencies	- Review all series of status reports - Develop a final report highlighting the information base and the findings - Provide a foundation for public policy decisions - Meet with appropriate decision makers to indicate how this report can be utilized to develop strategies of implementation

urban systems of the social policy environment, i.e., population, social indicators, the economic structure and the fiscal analysis, and the urban systems of the physical policy environment, i.e., land use, housing, open space, transportation, and infrastructure. The information was analyzed and used as the basis for projections in these areas for the years 1990 and 2000.

In Phase One, Stage Two, educational policy changes occurring throughout the country were examined. Among the issues reviewed were public support for education, school finance reform policies, the changing role of the federal government in education, the increasing popularity of private schools, and the emergence of instructional technologies. The impact of these trends on the Stamford Public Schools were assessed.

In Phase One, Stage Three, studies were completed which forecast the demand in magnitude, scope, and character for the public educational services needed to prepare students in Stamford to function successfully as citizens, family members, parents, workers, and consumers; which assess the school system's strengths, weaknesses, and problems that need to be considered in meeting projected demands for services; and which analyze the impact of the changes forecast in the environment upon the future of public education in Stamford prepared in collaboration with the Stamford Public Schools and the Stamford Educational Planning Committee.

Phase Two, Scenario Analysis, consisted of three stages: Issue Analysis, Scenario Analysis, and Final Report. The first stage, Issues Analysis, began with an assessment of a primary source of information: an exchange process with the public relying on an understanding of the goals and objectives, and issues and concerns about the Stamford Public Schools. These exchanges represent one component of the broader consultation process, which is a means of identifying

the views of relevant individuals and groups through a series of interviews and discussions, utilized in this comprehensive planning and policy study.

The consultation model is a planning mechanism for encouraging citizen participation in the process of making decisions on critical issues facing a city or a community. The goals of the process in this study are to identify issues and perspectives on the future of the Stamford Public Schools and to inform individuals about the project and its goals.

During the consultation process a significant amount of information was collected. This data was analyzed in an ongoing manner to allow the Study Team to utilize the information in the development of the scenario analyses. A list of key issues, which are presented in Chapter III in Volume I, were compiled and categorized at the conclusion of this activity.

In reviewing the direction of educational priorities for Stamford, information other than that gathered in the consultation process was examined and utilized. The additional sources tapped were SAT student interest data and several recent reports on career education in Stamford. Their importance lies in the identification of specific career clusters which may be appropriate for the secondary schools in the city and in the assessment of earlier labor market information.

In the second stage of Phase Two, a set of scenario analyses, viewing the future of Stamford in two modes, was developed. The first assumes that all current trends will continue. What will happen if, in fact, no changes in public policy are made, nor significant changes within the private sector occur? The second scenario introduces the probable impacts of the proposed Master Plan and Zoning Ordinance as these might affect Stamford's growth, and thus, its educational system.

Phase Two culminates in the final report, a four volume series of which this is the fourth. The data and findings revealed in this report provide a foundation upon which the Stamford Public Schools can make informed decisions regarding educational policy.

Final Report

During the conduct of this study twelve working papers were issued. A list of titles and their dates of publication are offered in Appendix A. In preparing the final report these papers were compiled into four volumes. Each must be read in context with the other volumes and the subcommittee reports of the Educational Planning Committee. Together, these works assess the implications of the current trends and policies in the social and physical policy environments for the future of public education in Stamford.

Volume I presents a summative view of the study. It documents the impact of the future direction of policy trends upon the educational programs and services of the Stamford Public Schools. Volume II reviews the social and physical policy environment within which the public education system operates. It describes existing trends and conditions, and examines areas where their impact is potentially the strongest. Volume III examines the educational policy changes that are occurring throughout the country. It discusses the impact of these trends on the future of public education in Stamford. Volume IV introduces a Facilities Utilization Plan for the Stamford Public Schools.

Volume IV

Volume IV contains the Study Team's recommendations regarding the physical facilities of the Stamford Public Schools as well as a description of the methods used to develop the Stamford Facilities Utilization Plan. Chapter I identifies

the goals and objectives of the plan and outlines the five-step process undertaken to develop it. An explanation of the proceedures used to determine the projected demand for schooling in Stamford and the result of these processes are revealed in Chapter II. Chapter III analyzes the projected demand for schooling under three assumptions. Included in the data presented is an examination of the school age population by age, race, neighborhood, and enrollment in public or private school. Chapter IV offers an assessment of the facilities of the Stamford Public Schools and their utilization. Chapter V provides the recommendations of the Study Team regarding the use of the system's facilities through the year 2000.

I. OVERVIEW OF FACILITIES STUDY

The Stamford Public Schools' Educational Public Policy Impact Study has provided the School Department and the Board of Education with a great deal of new information about the likely future of the city of Stamford and the relationship between that future and the current operation of the public schools.

Based upon the information provided by the study, the Board of Education must set policies that best meet the needs of Stamford's future students. The decisions that the Board makes, will to some degree, determine who these students will be as well as how successful they will become.

The Facilities Utilization Plan

The Facilities Utilization Plan, developed at the request of the Superintendent of Schools and the Stamford Board of Education, is designed to accompany and enhance the capital budget submitted to the Planning Board.

The goal of the Facilities Utilization Plan is to determine the number and types of facilities Stamford needs to meet the educational and social needs of its students through the year 2000. Its objectives are to identify the size, character, and needs of Stamford's future student body, to determine which schools should remain open and strengthened; and to determine which schools should be closed.

This Plan is the culmination of the Study Team's efforts. Based upon the Facilities Utilization Plan and its other work, the Study Team will provide the School Department with technical assistance in related areas, such as student assignments and curriculum development.

The Planning Process of the Facilities Study

This Plan was developed through a five-step process.

- Determine projected demand for services. The number and type of children likely to demand educational services in Stamford was projected through the year 2000. These projections were based on an analysis of the city's current demography, its housing supply, its land use pattern, its labor market, and its fiscal situation.
- Determine the projected supply of services. The physical capacity of the system's school buildings was projected taking into account changing programmatic considerations. This was accomplished through quantitative measurement.
- Analysis of supply versus demand. The number of likely public school pupils, by age group, was compared to the number of spaces available for that group. This analysis indicated the amount of excess capacity that will potentially exist within the system.
- Comparative analysis of the schools. The quality of each of the system's facilities was examined. A variety of physical, social, educational, and fiscal criteria was used to measure how specific facilities could best meet projected student needs.
- Development of policy options. The results of the comparative facilities analysis, combined with a series of educational policy assumptions developed by the Study Team in conjunction with the Stamford Educational Planning Committee, led to two suggested courses of action which are discussed in a later chapter.

II. DEMAND FOR SCHOOLING

Projected demand for public schooling is a key determinant of decisions about facilities. The Stamford Educational Public Policy Impact Analysis Study examined the demand for schooling by forecasting the demand in magnitude, scope, and character. Several analytic models were used in order to both project the demand by age and race and then to verify these projections.

The forecast of future population size is an inexact science at best. Despite the availability of sophisticated projection models and techniques there are numerous variables which influence the growth or decline of populations in urban areas. Given the complex dynamics of a city, such as Stamford, it is quite probable that there are forces which will contradict any single projection model. The most prudent course to follow, in cases of this type, is to apply several methods to search for a common set of results, thus establishing a reasonable level of confidence in the predictions.

Projections

Cohort survival model. The objective of the population projections is to predict the size of the school age population and provide a demographic profile of Stamford at various points in the future. While simplified projection techniques, such as straight line or ratio methods, may be appropriate for estimating the size of the population over time, focusing on a specific segment of the population, such as school age children, requires a greater level of accuracy and sensitivity to the numerous variables which influence the size of that part of the population. For this reason, the projection of future school enrollment has been based on a mathematical projection

method referred to as the cohort survival and residual migration model. This model provides the necessary integration of natural forces which influence population size, such as births and deaths, with social factors, such as migration.

The principal characteristic of the cohort survival model is its ability to account for the natural behavior of the population in terms of its rate of attrition from deaths and its rate of replacement from births. The model also accounts for the dynamics from one place of residence to another. The variables included in these calculations are survival rates, projection period, childbearing population, fertility ratios, and migration rates.

The initial set of population projections were completed on July 9th. The second set of projections, which the study is using as baseline information, were completed on July 15th and were projected through two different scenarios for which the same basic elements of the methodology apply (see Table II-One and II-Two).

For the first scenario, the projections were based upon overall trends of the total population without differentiating between fertility ratios of racial groups. For the second scenario, the projections of white and nonwhite population were calculated separately, each one based upon observed trends and applied to each neighborhood. The projections completed in the first scenario are general dimensions of the total population and are significantly below the projections of those of the second. This is a consequence of noting the high fertility rates for the nonwhite population, which results in higher projections than those when using average fertility rates. It is believed that the results of the second scenario analysis of July 15 are statistically more reliable than the results of the first July 9th model.

TABLE II-One
FORECAST OF POPULATION,
CITY-WIDE AND BY NEIGHBORHOOD,
WITH PERCENT CHANGE FOR YEARS
1970, 1980, 1990, and 2000

Neighborhood Study Area	1970	1980	1970-1980 % Δ [a]	1990	1980-1990 % Δ	2000	1990-2000 % Δ
STAMFORD	108,798	102,453	(5.8)	98,488	(3.8)	93,395	(5.2)
Mid-City	20,252	18,073	(10.8)	16,827	(6.9)	15,225	(9.5)
Glenbrook	13,532	13,563	.2	12,821	(5.5)	11,816	(7.8)
East Side-Cove	12,641	12,349	(2.3)	11,780	(4.6)	10,763	(8.6)
Shippan	2,761	2,638	(4.5)	2,364	(10.4)	2,077	(12.1)
South End	4,237	3,010	(29.0)	3,599	19.6	4,232	17.6
Waterside	5,915	5,934	.3	7,020	18.3	8,395	19.6
West Side	11,062	9,805	(11.4)	10,915	11.3	11,990	9.8
Westover	10,004	9,340	(6.6)	8,336	(10.7)	7,234	(13.2)
TOR/ Newfield	7,933	6,688	(15.7)	5,911	(11.6)	5,091	(13.9)
Springdale	6,841	7,019	2.6	6,418	(8.6)	5,564	(13.3)
North Stamford	13,620	14,034	3.0	12,497	(11.0)	11,006	(11.9)

Sources: U.S. Department of Commerce, Bureau of the Census, 1970 Census of Population (Washington, D.C.: U.S. Department of Commerce, Bureau of the Census, 1971.

U.S. Department of Commerce, Bureau of the Census, 1980 Census of Population (Washington, D.C.: U.S. Department of Commerce, Bureau of the Census, 1981).

Stamford Educational Public Policy Impact Study Team, SEPPIS Study Team Projections, July 15, 1982.

Note: [a](decrease), increase

TABLE II-TWO
NEIGHBORHOOD RANKING OF PERCENT CHANGE
IN POPULATION TRENDS FOR 1980 TO 2000

Neighborhood Study Area	Rank	% Δ 1980-1990	Neighborhood Study Area	Rank	% Δ 1990-2000
South End	1	19.6	Waterside	1	19.6
Waterside	2	18.3	South End	2	17.6
West Side	3	11.3	West Side	3	9.8
East Side-Cove	4	(4.6)	Glenbrook	4	(7.8)
Glenbrook	5	(5.5)	East Side-Cove	5	(8.6)
Mid-City	6	(6.9)	Mid-City	6	(9.5)
Springdale	7	(8.6)	North Stamford	7	(11.9)
Shippan	8	(10.4)	Shippan	8	(12.1)
Westover	9	(10.7)	Westover	9	(13.2)
North Stamford	10	(11.0)	Springdale	10	(13.3)
TOR/Newfield	11	(11.6)	TOR/Newfield	11	(13.9)

Source: Stamford Educational Public Policy Impact Study Team.
SEPPIS Study Team Projections. July 15, 1982.

Notes: [a](decrease), increase
[b]Highest rank represents the most positive change.

Another point to consider in the preparation of these projections is the fact that school enrollment is based upon attendance areas which encompass the various neighborhoods of the city. It should be noted that there is significant variation in the composition of populations in these neighborhoods. In order for the projection results to accurately reflect the geographic diversity in estimating demand, it is necessary that the projections be localized to describe geographic units.

The geographic unit used as a basis for these projections is the census tract (both the 1970 and 1980 census figures were used). Stamford has 24 tracts which have been aggregated into 11 study neighborhoods.

Occupancy Model Verification

Following a review of the results of the cohort survival projection by school administrators and municipal officials, questions were raised about projections as they apply to specific neighborhood locations. To address these concerns, the Study Team has conducted a series of projections to verify the accuracy of the initial analysis. The approach was based on the premise that population trends during the recent past and for the planning period adopted by the study will be in large measure, a function of structural phenomena in the city. This is to say, that the size and composition of an urban population is influenced to a significant degree by the physical and socioeconomic environment of the city. Given the limitations of time and availability of data, it has been necessary to confine the analysis of this relationship to the area of housing.

The analysis of the relationship between housing and population was undertaken in two stages. The first was an analysis of citywide trends. This is followed by a similar analysis on a neighborhood by neighborhood basis.

In each case, population estimates were made and then compared with the corresponding results of the cohort survival study.

The verification of the cohort survival model by school age (5-17 year-olds) neighborhood totals proved that the cohort model was statistically accurate in that, for the 1990 projections, there was a difference of about 700 students.[1] The year 2000 projections, due to the assumptions in the occupancy model, show a difference of approximately 1,300 students (see Tables II-Three and II-Four, Figures II-One to II-Three). The differences in the cohort survival findings and the occupancy model findings were most apparent in the age distribution of the neighborhoods. In all cases, the cohort survival model predicted a larger number of elementary school children and a smaller number of high school students (see Figure II-Four). This, in turn, is due to the difference in the structure of the two models: the cohort survival model is based upon a holding capacity study[2] from the Stamford Planning Department based upon the theoretical maximum housing allowed if the 1981 Master Plan is implemented. Both models have limitations; it is possible that the cohort survival model underestimates high school demand and the occupancy model underestimates the elementary school demand by a significant degree. Keeping in mind the limitation of the cohort survival method, the demand analysis in the following chapter is based on this method's projections for 1990 and 2000.

---

[1]At the request of the Stamford Board of Education and in order to plan more exactly by the grade level organization in Stamford (K-6, 7-8, 9-12), projections using the different models were calculated to fit the age groups 5-11, 12-13, and 14-17.

[2]The hodling capacity study was redefined by secondary variables of occupancy and housing design which are surrogates of financial conditions.

TABLE II-Three
SCHOOL AGE POPULATION (5-17) PROJECTIONS
BY COHORT MODEL
1990 - 2000

Neighborhood Study Area	1990	2000
Mid-City		
K-6	1,397	1,073
7-8	282	342
9-12	524	772
Total	2,203	2,187
Glenbrook		
K-6	1,116	877
7-8	253	270
9-12	482	587
Total	1,851	1,734
East Side-Cove		
K-6	1,032	797
7-8	235	250
9-12	470	537
Total	1,737	1,584
Shippan		
K-6	157	150
7-8	38	42
9-12	105	79
Total	300	271
South End		
K-6	425	438
7-8	111	124
9-12	197	255
Total	733	817
Waterside		
K-6	767	960
7-8	186	260
9-12	473	487
Total	1,426	1,707
West Side		
K-6	1,165	1,189
7-8	269	347
9-12	548	703
Total	1,982	2,239

Table II-Three (cont.)

School Age Population (5-17) Projections
by Cohort Model, 1990 - 2000

Neighborhood Study Area	1990	2000
Westover		
K-6	537	481
7-8	144	135
9-12	338	262
Total	1,019	878
TOR/ Newfield		
K-6	370	340
7-8	102	94
9-12	236	178
Total	708	612
Springdale		
K-6	507	363
7-8	118	114
9-12	225	249
Total	850	726
North Stamford		
K-6	758	768
7-8	214	204
9-12	576	369
Total	1,548	1,341
STAMFORD		
K-6	8,233	7,436
7-8	1,952	2,182
9-12	4,174	4,478
Total	14,359	14,096

Table II-Four
PROJECTION OF TARGET AGE GROUPS
BY OCCUPANCY MODEL
1990-2000

Neighborhood Study Area	1990	2000
Mid-City		
K-6	678	716
7-8	343	288
9-12	1,065	1,287
Total	2,086	2,291
Glenbrook		
K-6	461	220
7-8	180	105
9-12	682	558
Total	1,323	883
East Side-Cove		
K-6	799	589
7-8	237	181
9-12	575	442
Total	1,611	1,212
Shippan		
K-6	159	89
7-8	70	46
9-12	205	173
Total	434	308
South End		
K-6	240	164
7-8	108	106
9-12	357	463
Total	705	733
Waterside		
K-6	695	559
7-8	208	193
9-12	804	1,062
Total	1,707	1,814
West Side		
K-6	700	470
7-8	264	212
9-12	817	854
Total	1,781	1,536

Table II-Four (cont.)

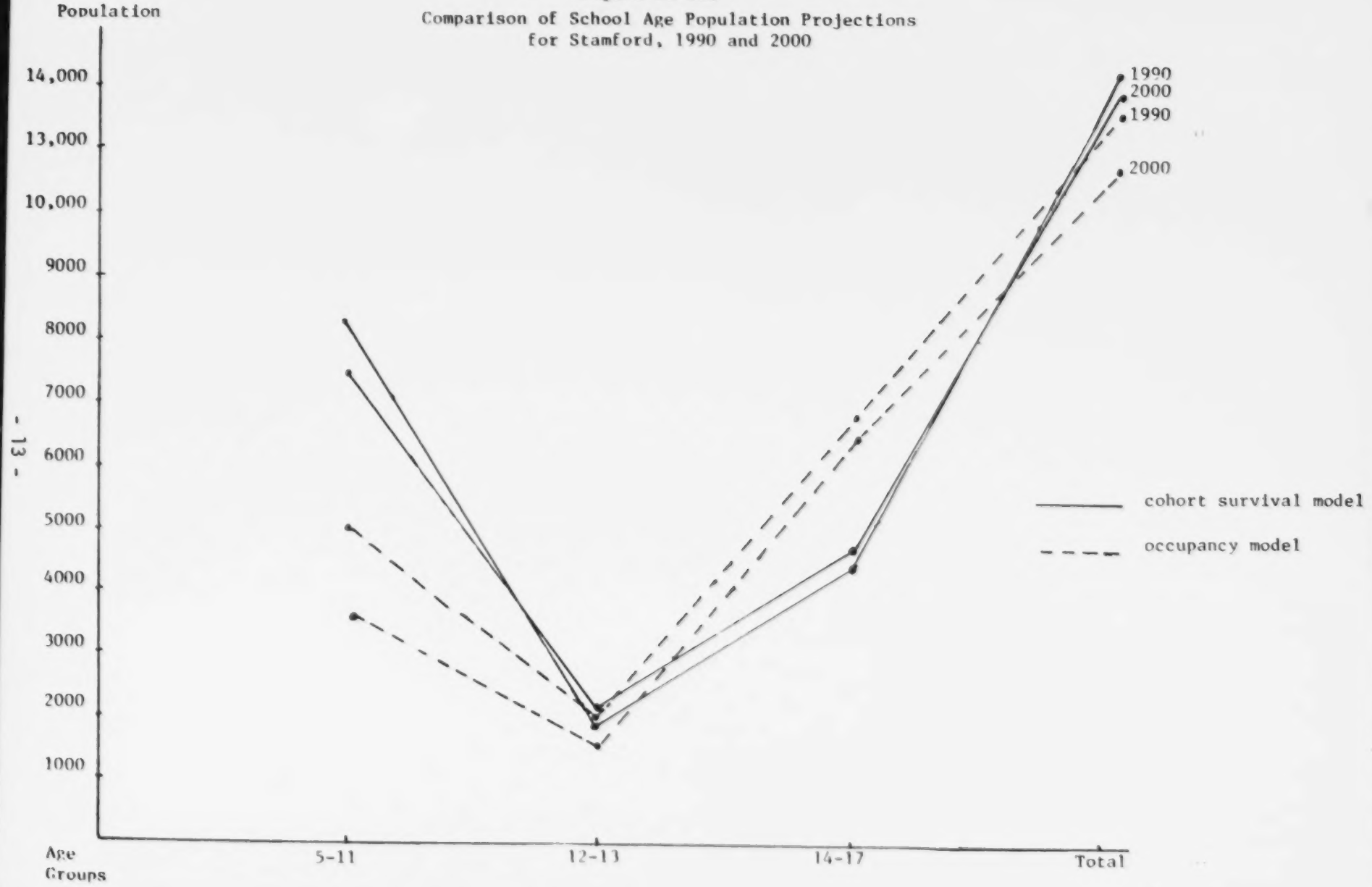
Projection of School Age Groups
By Occupancy Model, 1990-2000

Neighborhood Study Area	1990	2000
Westover		
K-6	181	76
7-8	194	118
9-12	696	626
Total	1,071	820
TOR/ Newfield		
K-6	219	91
7-8	77	33
9-12	302	195
Total	598	319
Springdale		
K-6	330	186
7-8	157	116
9-12	591	566
Total	1,078	868
North Stamford		
K-6	473	182
7-8	189	77
9-12	599	347
Total	1,261	606
STAMFORD		
K-6	4,934	3,341
7-8	2,027	1,474
9-12	6,693	6,573
Total	13,654	12,820

STAMFORD EDUCATIONAL PUBLIC POLICY IMPACT STUDY

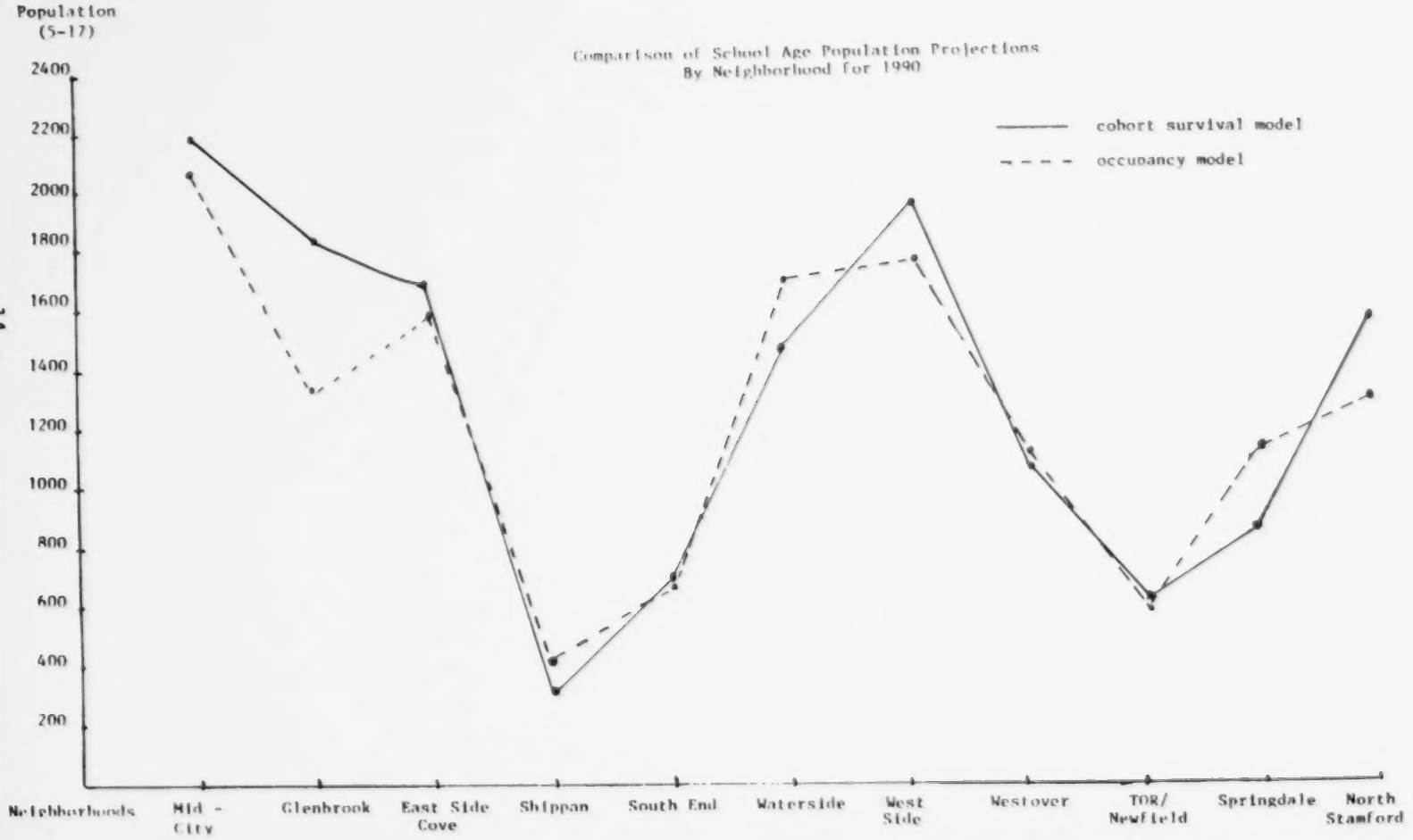
Figure II-One

Comparison of School Age Population Projections
for Stamford, 1990 and 2000



STAMFORD EDUCATIONAL PUBLIC POLICY IMPACT STUDY

Figure II-Two



STAMFORD EDUCATIONAL PUBLIC POLICY IMPACT STUDY

Figure II-Three

Comparison of School Age Population Projections
By Neighborhood for 2000

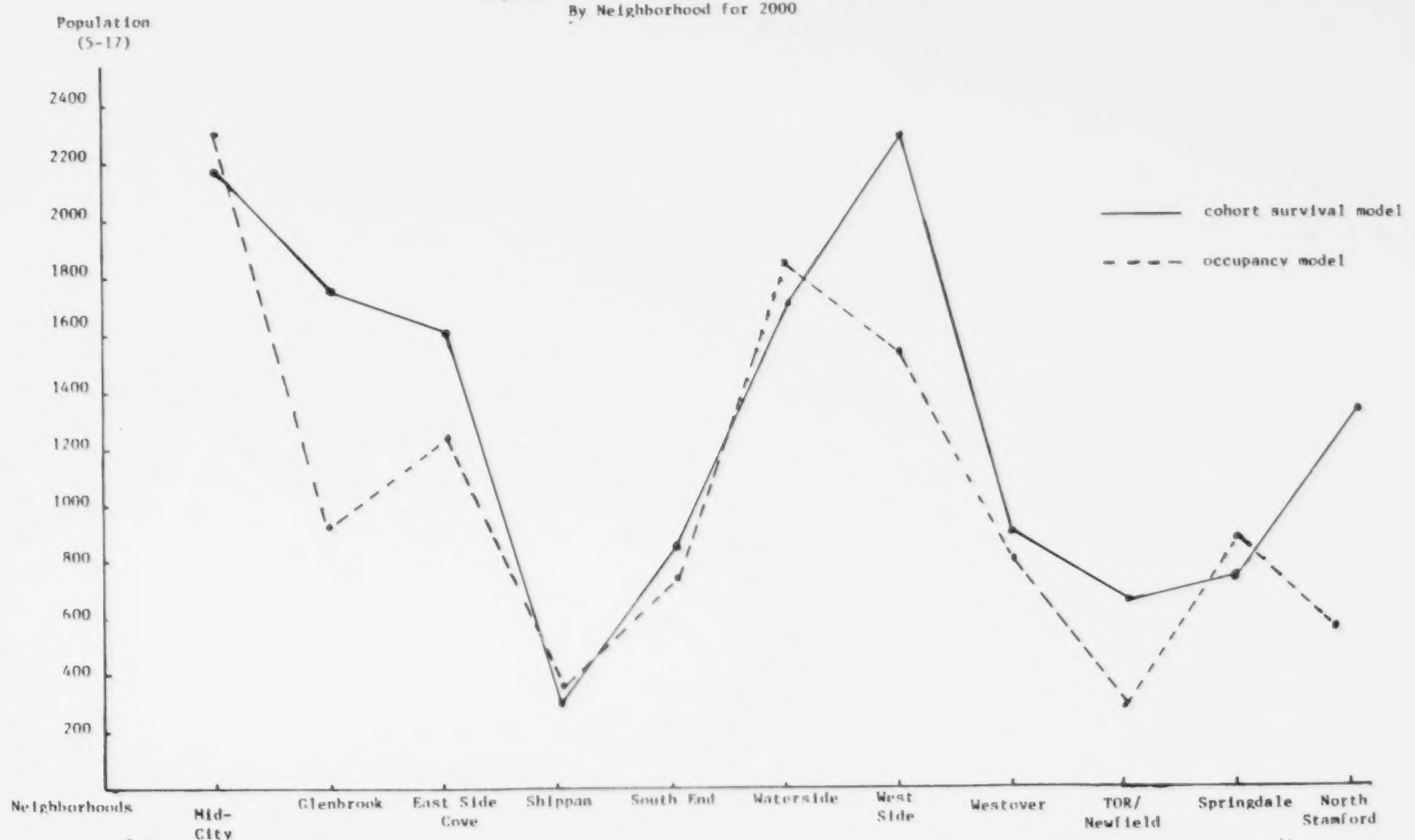
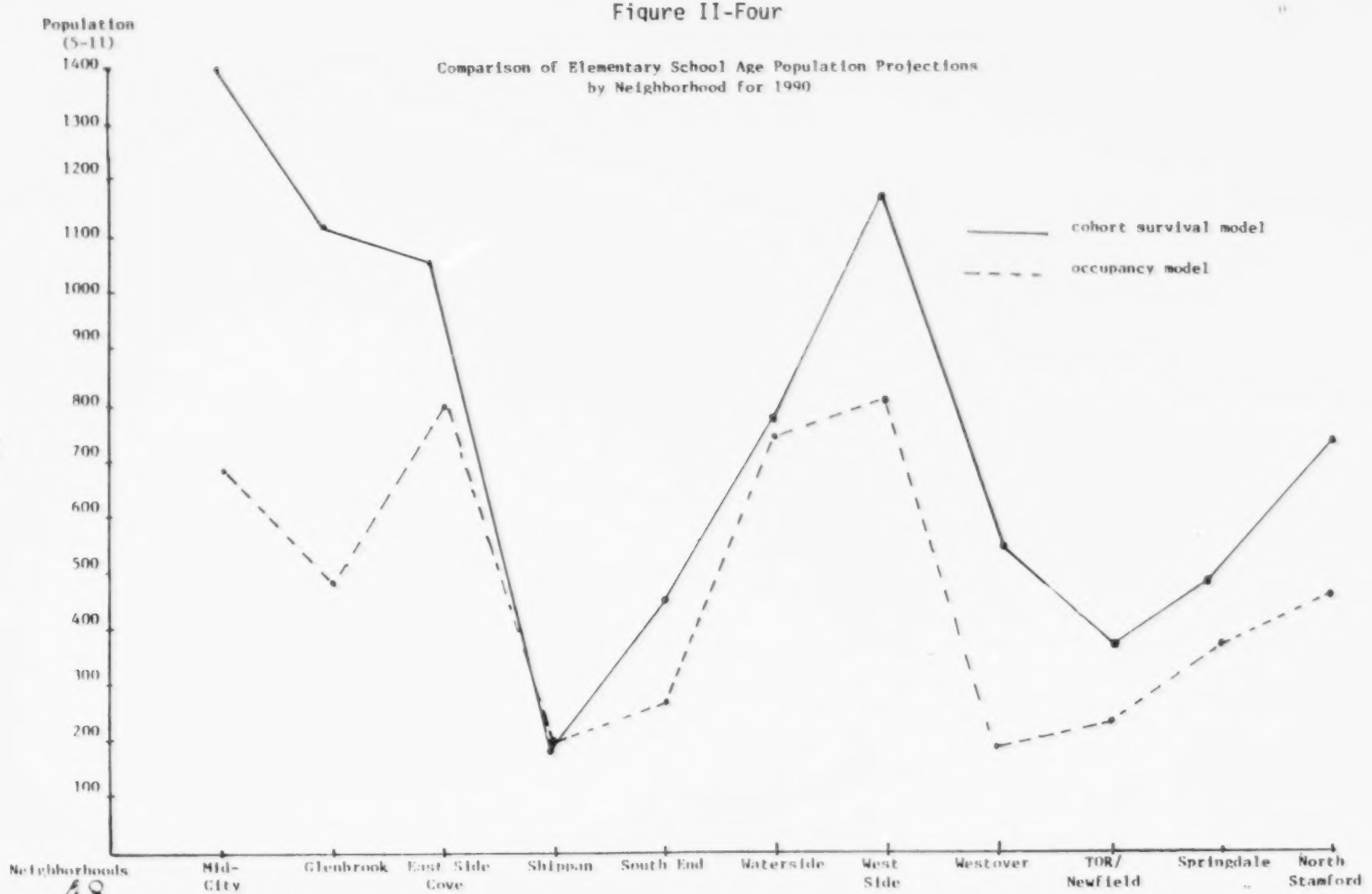


Figure II-Four

Comparison of Elementary School Age Population Projections
by Neighborhood for 1990



One possible explanation for the differences between the two models is that the occupancy model assumes that the housing market will have a continued impact on the composition and origin of the population. Implicit in this assumption is that the relationship between occupancy and design is a composite product of market elasticity and development strategies. The housing market is inelastic to local demand and is responsive to the national labor market from which Stamford draws its executive work force. Real estate entrepreneurs will capitalize on the scarcity of land and housing and will product projects which have the highest financial return even if large segments of the population are excluded from the marketplace.

The impact of these forces on the school age occupancy forecasts is quite simple. First, housing values will be extremely high and those housing opportunities that are appropriate in terms of design for families with children will be beyond their economic ability, particularly when it comes to families with small children in the K-6 grade group. Second, additions to the housing supply will be multifamily and the design characteristics will deter family occupancy. Families who do reside in the city will, in all likelihood, be mature in terms of age and financial resources and will have children approaching college age.

On the other hand, the cohort survival mobility model assumes that the housing market in Stamford will respond to the natural growth in the population enabling out-migration to remain at the levels experienced during the 1970s. This means that the children of the baby boom who are expected to produce an enormous new surge of marriage and childbearing will be entering the housing market. Thus, if the housing market responds to the needs of this generation of Stamford natives, an increase in families with small children can be expected.

III. PLANNING STRATEGIES

Needs Assessment: A Supply and Demand Comparison

The core of any decision concerning the allocation of resources is an assessment of the needs of the client population. The population is the school age population of elementary, middle, and senior high schools; age groups 5-11, 12-13, and 14-19. The first set of questions raised about this population is: How many potential students will there be and where will they live? The second set of questions raised is about the characteristics of these students and their families, such as age, family type, housing, educational level of parents, income, type of occupation, and other education relevant characteristics. The third set of questions relates to the current school system characteristics and its structural aspects, the cost-efficiency, and, specifically, the learning environment.

The needs assessment in Stamford was performed given baseline data for 1981-1982 and the identified projections for 1990 and the year 2000. This was compared to the 1981-1982 nominal capacity figures previously determined by the Stamford School Department for all the schools in the city. To begin obtaining the data, the total population for 1980 was assessed by neighborhood study area for total population, school age population, race, and ethnicity.

Total public school enrollment between 1977 and 1981 experienced a decline of 3,300. Although whites and blacks consistently lost population, the number of Spanish and Asian students increased. As the white population declined at a faster rate than minorities over the five year period, there was a 7 percent increase, from 33 percent to 40 percent, in the proportion of minority students (see Table III-One).

TABLE III-ONE
STAMFORD PUBLIC SCHOOL ENROLLMENT BY RACE
1977-78 TO 1981-82

Total Public Schools

School Year	Total Public Schools [a]	% Minority	White		Black		Spanish		Asian		American Indian	
			#	%	#	%	#	%	#	%	#	%
1977-1978	17,483	33.6	11,613	66.4	4,510	25.8	1,172	6.7	187	1.1	1	-
1978-1979	16,667	35.1	10,812	64.9	4,416	26.5	1,205	7.2	234	1.4	0	0
1979-1980	15,578	36.1	9,955	63.9	4,236	27.2	1,175	7.5	210	1.3	2	-
1980-1981	14,870	38.1	9,208	61.9	4,173	28.1	1,261	8.5	226	1.5	2	-
1981-1982	14,084	40.1	8,438	59.9	4,082	29.0	1,305	9.3	259	1.8	0	0

Source: Stamford Public Schools, Office of Research and Development, Summary of Pupil Racial Background Survey (Stamford: Stamford Public Schools, October 1, 1977, 1978, 1979, 1980, 1981).

Note: [a]Includes Home Instruction, but not state vocational high school.

In analyzing the distribution of the population by race, sharp differences between neighborhoods were noted; seven have a white population of over 85 percent, one has almost 80 percent, and another, the West Side, 51 percent. Only two neighborhoods, Waterside and the South End, have population compositions of less than that, about 35 percent white. These two neighborhoods, located in proximity to each other on the western and southern side of the city, are clustered around the turnpike.

The history of Stamford Public School enrollment by race for the last five years, 1977-1978 to 1981-1982, illustrates a pattern of demographic change in the city which remains consistent for each grade grouping. On the elementary level (Table III-Two) between 1977 and 1982 the citywide elementary population declined by almost 1,700 students. Although the number of black and white students has declined, the population of minority students to the total rose from 36 percent in 1977 to 41 percent in 1982. Spanish, Asians, and blacks slightly increased their proportion of the total population.

During the past five years the middle school population has declined by less than 1,000 students. This is shown in Table III-Three. Since minority students have lost population at a slower rate than whites, their proportion of the total population has increased from 35 percent to 41 percent.

The senior high schools show the least loss of population: less than 800 students. While the number of white students declined, all minority groups gained slightly in population. This is reflective of an almost 10 percent increase in the population of minority students, from 28 percent to 37 percent (see Table III-Four).

TABLE III-TWO
STAMFORD PUBLIC SCHOOL ENROLLMENT BY RACE
1977-78 TO 1981-82
Elementary schools

School Year	Total Elementary Enrollment	% Minority	White		Black		Spanish		Asian		American Indian	
			#	%	#	%	#	%	#	%	#	%
1977-1978	8,764	36.3	5,583	63.7	2,344	26.7	718	8.2	119	1.4	0	0
1978-1979	8,146	38.0	5,059	62.1	2,245	27.6	697	8.6	145	1.8	0	0
1979-1980	7,701	38.2	4,759	61.8	2,125	27.6	701	9.1	116	1.5	0	0
1980-1981	7,468	39.8	4,495	60.2	2,125	28.5	736	9.9	112	1.5	0	0
1981-1982	7,086	41.6	4,139	58.4	2,056	29.0	749	10.6	142	2.0	0	0

Source: Stamford Public Schools, Office of Research and Development, Summary of Pupil Racial Background Survey (Stamford: Stamford Public Schools, October 1, 1977, 1978, 1979, 1980, 1981).

TABLE III-THREE
STAMFORD PUBLIC SCHOOL ENROLLMENT BY RACE
1977-78 TO 1981-82
Middle Schools

School Year	Total Middle School Enrollment	% Minority	White		Black		Spanish		Asian		American Indian	
			#	%	#	%	#	%	#	%	#	%
1977-1978	2,992	35.2	1,940	64.8	831	27.8	189	6.3	32	1.1	0	0
1978-1979	2,776	36.0	1,777	64.0	763	27.5	198	7.1	38	1.4	0	0
1979-1980	2,533	36.5	1,608	63.5	693	27.4	190	7.5	40	1.6	2	0.1
1980-1981	2,270	39.4	1,376	60.6	657	28.9	200	8.8	36	1.6	1	-
1981-1982	2,086	41.1	1,228	58.9	639	30.6	192	9.2	27	1.3	0	0

Source: Stamford Public Schools, Office of Research and Development, Summary of Pupil Racial Background Survey (Stamford: Stamford Public Schools, October 1, 1977, 1978, 1979, 1980, 1981).

TABLE III-FOUR
STAMFORD PUBLIC SCHOOL ENROLLMENT BY RACE
1977-78 TO 1981-82
High Schools

School Year	Total High School Enrollment	% Minority	White		Black		Spanish		Asian		American Indian	
			#	%	#	%	#	%	#	%	#	%
1977-1978	5,691	28.3	4,077	71.6	1,315	23.1	262	4.6	36	.6	1	-
1978-1979	5,678	30.6	3,943	69.5	1,385	24.4	299	5.3	51	.9	0	0
1979-1980	5,277	32.4	3,566	67.6	1,382	26.2	275	5.2	54	1.0	0	0
1980-1981	5,042	34.6	3,300	65.5	1,349	26.8	314	6.2	78	1.5	1	-
1981-1982	4,819	37.3	3,021	62.7	1,357	28.2	352	7.3	89	1.8	0	0

Source: Stamford Public Schools, Office of Research and Development, Summary of Pupil Racial Background Survey (Stamford: Stamford Public Schools, October 1, 1977, 1978, 1979, 1980, 1981).

Note: Does not include state vocational high school.

Private School Enrollment: Its Impact Upon the Stamford Public School System

In Volume III of this report, the Stamford Educational Public Policy Impact Study has examined the national issue of the growth of private school enrollment and assessed the local concerns about this growth at the expense of Stamford Public Schools. There is a great concern in Stamford about the movement of public school students to the private schools, and in fact, a part of the recent Educational Planning Committee's Survey on Student Needs identified aspects of these issues by selecting nonpublic school parents as respondents.[3] While there has been a national trend of growth in the private schools, information recently released by the National Institute of Education shows that this upward movement has ceased.

There is a great deal of idiosyncratic and anecdotal information about a growing number of families who place their children in the private schools, but the statistical data does not document such information. Although there are record keeping problems concerning private school information, a review of a decade (1970 to 1981) shows that the proportion of private school students in grades K-12 fell from 25 percent of the total enrollment (excluding Wright Technical High School) to a low of 17.1 percent in 1973. The proportion remained at this level until 1981 when it moved to 20 percent (see Figure III-One and Table III-Five).

A close examination of the 1981-1982 computer files of population totals for the study neighborhoods by grade and for race for public and private schools (including Wright Technical High School is shown in Table III-Six.

---

[3]The nonpublic school parents identified such problems as safety and not enough emphasis on college preparatory courses. These perceptions were not shared by parents, teachers, and students involved in public school.

STAMFORD EDUCATIONAL PUBLIC POLICY IMPACT STUDY

Figure III-One
Proportion of Private School Students
in Total Stamford School Age Population
Grades K-12, 1970-1981

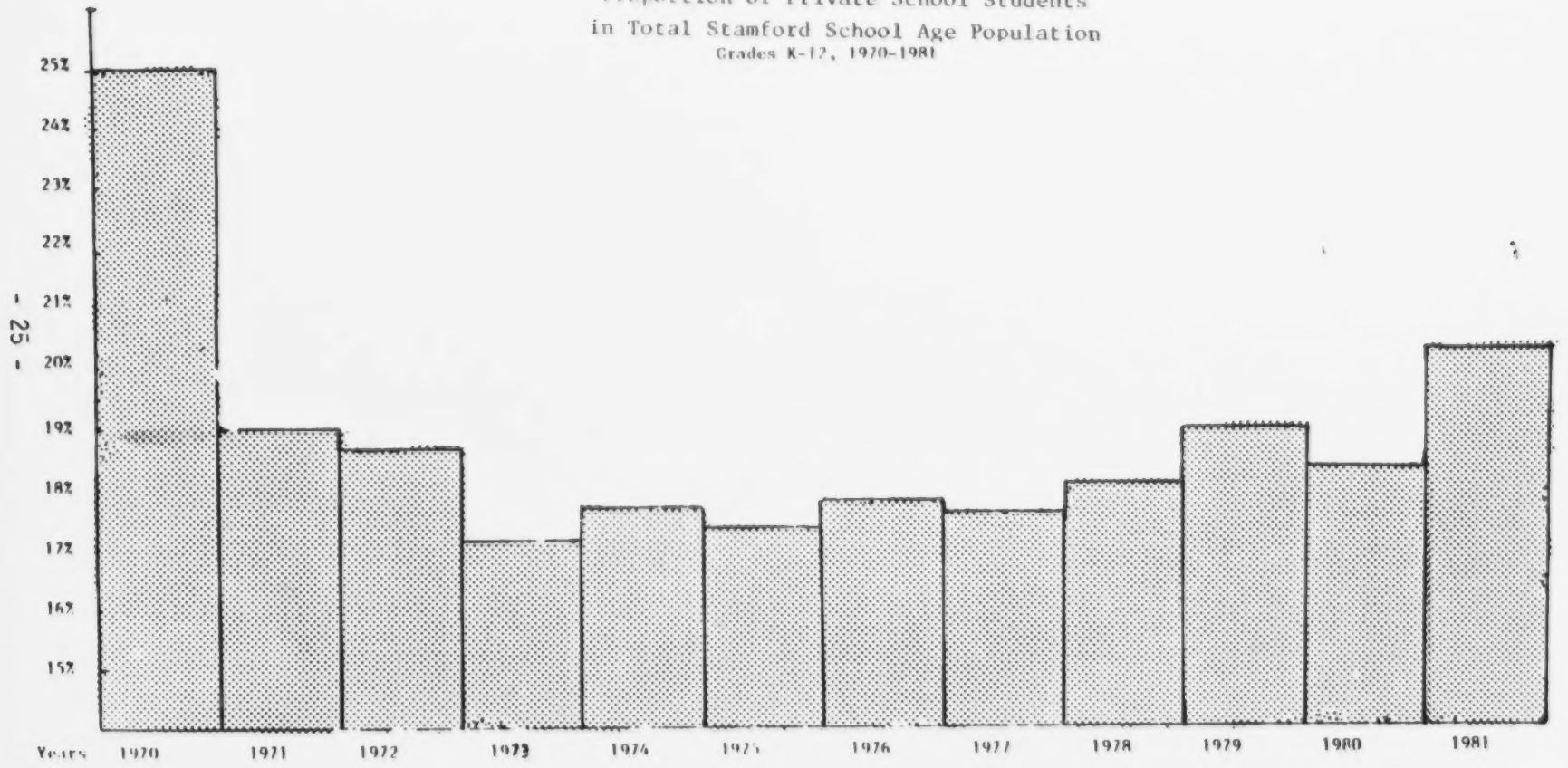


TABLE III-Five

ENROLLMENT OF STAMFORD STUDENTS

IN PUBLIC AND PRIVATE SCHOOLS

GRADES K-12

1970 TO 1980

YEAR	STAMFORD PUBLIC SCHOOLS		STAMFORD PRIVATE SCHOOLS		TOTAL[a] ENROLLMENT
	Number	%	Number	%	Number
1970	20830	75.0	5207	25.0	26037
1971	20730	81.0	4847	19.0	25577
1972	20440	81.3	4698	18.7	25138
1973	20002	82.9	4134	17.1	24136
1974	19524	82.4	4184	17.6	23708
1975	19118	82.6	4020	17.4	23138
1976	18360	82.3	3952	17.7	22312
1977	17506	82.5	3720	17.5	21226
1978	16739	82.0	3674	18.0	20413
1979	15692	81.2	3643	18.8	19335
1980	14911	81.7	3535	18.3	18446

Source: Stamford Public Schools, Office of Research and Development

Note: [a]Excludes Wright Technical High School

STAMFORD EDUCATIONAL PUBLIC POLICY IMPACT STUDY

Table III-Six
Enrollment of Stamford Students by Grade Level in Public and Private Schools
1980-1981

Grade Levels	Total Public School Population	Public School # of Students	Public School # of Total	Private School (including Wright) # of Students	Private School (including Wright) % of Total
K-6	8,323	6,500	78%	1,823	21.9%
7-8	2,750	1,981	72%	769	28.0%
9-12	6,934	4,611	65.5%	2,323	33.5%
TOTAL	18,007	13,092	72.7%	4,915	27.3%

When analyzed by grade level and by neighborhood (see Tables III-Seven and III-Eight), there is a variation in 1981-1982, ranging from a low of 13 percent in K-6 in South End to a high of 32 percent in North Stamford and Shippan; similarly, a low of 13 percent in South End in 7-8 and in the high school age group, Waterside is the lowest with 26 percent and Newfield, Shippan, and North Stamford with 39 percent.

In summary, the last decade, with the exception of this past year, has seen a decline in the proportion of Stamford students attending private schools. The very slight increase in this proportion for 1981 is a result of the closing of Ryle and Franklyn and the phasing out of Rippowam. The actual numbers also reveal a substantial decline, from 5,207 students in 1970 to 3,606 in 1981. The Study Team believes that the proportion will stabilize and that the actual number, as a share of the declining total school age population in the city, will continue to decline or remain constant.

The Demand for Schooling in Stamford

The community needs assessment analysis of the demand for schooling in Stamford began with a determination of the forecast enrollment for each neighborhood study area which was then measured against the nominal capacity of the school in the same neighborhood study area. In other words, to obtain the community level of schooling needs the projected enrollment was subtracted from the capacity, resulting in an excess number of seats or a seat deficit indicative of the demand for seats. The July 15 "baseline" forecast of population for the years 1990 and 2000 by neighborhood for school age population was utilized for the forecast of enrollment, as discussed in the previous chapter.

Under this analysis of the school age population by cohort for the years 1980, 1990, and 2000, it was determined that the rate of change between 1980 and 1990 would decline by approximately 25 percent for all school age children,

STAMFORD EDUCATIONAL PUBLIC POLICY IMPACT STUDY

Table III-Seven

STAMFORD SCHOOL AGE STUDENTS
1981 - 1982
Percent Attending Private Schools
by Grade Level Organization

City Wide and by Neighborhood

Grade	Mid City Total	Mid City %	North Total	North Stamford %	Glenbrook Total	Glenbrook %	East Side Cove Total	East Side Cove %	So. End. Total	So. End. %	Westover Total	Westover %	Waterside Total	Waterside %	Shippan Total	Shippan %	Newfield Total	Newfield %	Springdale Total	Springdale %	West Side Total	West Side %	City Wide %
K-6	223	24	434	32	169	17	181	20	42	13	170	22	112	16	77	32	109	20.5	93	18.3	213	21	21
7-3	74	22	200	40	66	22	87	20	9	13	101	35	31	24	49	59	62	33	42	32.8	48	15	28
9-12	239	31	492	39	233	31	232	37	90	36	213	28	138	36	88	39	192	39	156	37.2	250	30	33.5

Note: Includes Wright Technical High School

Table III-Eight
Comparison of School Age Population in Public and Private Schools
1981-1982

Neighborhood Study Area	Total				Public School Age Population								Private School Age Population		
	K-6	7-8	9-12	Total	K-6		7-8		9-12		Total		K-6	7-8	9-12
					#	%	#	%	#	%	#	%			
Mid-City	934	329	765	2,028	711	76.0	255	77.5	526	68.75	1,492	73.57	223	74	239
Glenbrook	1,006	304	742	2,052	837	83.2	238	78.29	509	68.6	1,584	77.19	169	66	233
East Side-Cove	922	287	635	1,844	741	80.37	200	69.69	403	63.46	1,344	72.89	181	87	232
Shippan	240	91	226	557	163	67.9	42	46.15	138	61.06	343	61.58	77	49	88
South End	320	72	252	644	278	86.88	63	87.5	162	64.29	503	78.1	42	9	90
Waterside	697	215	540	1,452	585	83.93	184	85.58	402	74.4	1,171	80.65	112	31	138
West Side	1,013	310	825	2,148	800	78.97	262	84.52	575	69.69	1,637	76.21	213	48	250
Westover	788	286	765	1,839	618	78.43	185	64.69	552	72.16	1,355	73.68	170	101	213
TOR	533	186	496	1,215	424	79.55	124	66.66	304	61.29	852	70.12	109	62	192
Springdale	507	170	419	1,096	414	81.66	128	75.29	263	62.77	805	73.45	93	42	156
North Stamford	1,363	500	1,269	3,132	929	68.16	300	60.0	777	61.23	2,006	64.05	434	200	492
STAMFORD	8,323	2,750	6,934	18,007	6,500	78.1	1,981	72.0	4,611	66.5	13,092	72.7	1,823	769	2,323

Source: Stamford Public Schools, Office of Research and Development, July, 1982

5-19 years-old, but increase a little less than five percent in the elementary cohort, 5-9 years-old. In the neighborhoods, the changes range from a precipitous overall 50 percent loss in Shippan and North Stamford between 1980 and 1990, to a modest loss of under two percent in the South End (see Table III-Nine).

In order to depict the demand for education more accurately, the school age population projected for the 5-19 age groups was redistributed into age cohorts that coincide with the school levels: elementary, K-6; middle, 7-8; and high schools, 9-12. Thus, the enrollment projection figures presented earlier in the age cohorts of 5-9, 10-14, and 15-19 have been reaggregated into age cohorts of 5-11, 12 and 13, and 14-17. The 18 and 19 year cohorts have been excluded. As a result of this adjustment, a slightly smaller decline of 23 percent is noted for all school age children (5-17 year-olds) between the years 1980 and 1990. By grade level, the elementary age group (5-11 year-olds) showed a slight decline, while the middle and high school levels showed higher losses for 1990. By 2000, the total enrollment levels off to 14,000.

For neighborhood by neighborhood analysis, the total number of school age children, 5-19 year-olds, is listed in Table III-Ten. It is noted that North Stamford has the highest number of school age children followed by Mid-City, Glenbrook, and West Side. East Side Cove, Westover, and Waterside all have approximately 2,000 or more school age children. Turn of the River/ Newfield, Springdale, South End, and Shippan are much lower in total number. Table III-Ten also indicated the neighborhood ranking by school age population.

Similar to the overall school age population and the demographic profile summary, there are clear distinctions between neighborhoods by race and ethnicity when the school age population is assessed by race and age group for

STAMFORD EDUCATIONAL PUBLIC POLICY IMPACT STUDY

Table III-Nine
Percent Change in School Age Population (using 5-14 Year-Old Cohort Model) by Neighborhood Between 1990 and 2000

Rank	Neighborhood	% Δ in school age population	
		1990	2000
1	South End	-1.8	+14.5
2	Mid-City	-3.6	+5.2
3	West Side	-8.8	+14.8
4	Waterside	-12.9	+15.8
5	Glenbrook	-15.3	-2.5
6	East Side	-16.5	-5.8
7	Springdale	-30.0	-11.3
8	Westover	-46.0	-15.9
9	TOR/Newfield	-46.6	-15.6
10	Shippan	-50.0	-13.4
11	North Stamford	-50.2	-18.3
STAMFORD		-25.7	- 0.8

Source: Stamford Educational Public Policy Impact Study Team, SEPPIS Study Team Projections, 1982.

Table III-Ten
PERCENT OF SCHOOL AGE POPULATION
OF TOTAL POPULATION IN 1980
BY NEIGHBORHOOD STUDY AREA
BY NUMBER, PERCENT AND RANK

Neighborhood Study Area	Total Population	School Age Population	Percent	Rank[a]
Mid-City	18,073	2,552	14.1	11
Glenbrook	13,563	2,465	18.2	10
East Side-Cove	12,349	2,361	19.1	9
Shippan	2,638	717	27.2	3
South End	3,010	842	28.0	2
Waterside	5,934	1,930	32.5	1
West Side	9,805	2,474	25.2	5
Westover	9,340	2,219	23.8	6
TOR/Newfield	6,688	1,555	23.3	7
Springdale	7,019	1,375	19.6	8
North Stamford	14,034	3,718	26.5	4
STAMFORD	102,453	22,208	21.7	

Source: U.S. Department of Commerce, Bureau of the Census, 1980 Census of Population (Washington, D.C.: U.S. Department of Commerce, Bureau of the Census, 1981).

Note: [a]The area ranked #1 is the area with the highest percent of school age children.

1980. As Table III-Eleven and Figure III-Two indicate, five neighborhoods have a minority population of under 5 percent: Westover, Springdale, North Stamford, Turn of the River, and Shippan.

Table III-Twelve ranks the neighborhoods under study by their percentage of minority students to their total school age population (with adjusted percentages for the 5-17 year-olds included).

This is with a combined school age population of 9,584, or 43 percent of the total Stamford 5-19 population. Three neighborhoods contain between 20 to 30 percent of minority school age children: Mid-City, Glenbrook, and East Side-Cove, with a combined school age population of 7,378, or 33 percent. Three neighborhoods, Waterside, South End, and West Side, range from almost 60 percent to almost 80 percent minority, with 5,246 or less than 25 percent of the combined school age population.

Using enrollment figures for the total school age population for the 1981-1982 school year in Stamford (K-6, 8,323; 7-8, 2,750; and for 9-12, 6,934; totaling 18,007), the public school enrollment of the K-6 school age population is 6,500 or a little over 78 percent of this age group; for 7-8, 1,981 or 72 percent. For the 9-12 year olds, there are 4,611 Stamford children, or 67 percent, who attend public school (see Table III-Eight). There is approximately a 6 percent drop in the number of students attending public school between the elementary, middle school, and high school levels. An assessment of the percentage of public elementary and middle school attendance (see Table III-Thirteen) by neighborhood shows that there is about a 30 percent difference among neighborhoods between the South End, which has almost 90 percent of the total school age population in public school, to Shippan, which has about 60 percent of its school age population in public school. Those with

Table III-Eleven

SCHOOL AGE POPULATION BY RACE AND BY AGE, 1980

Neighborhood Study Area	Total School Age				Black					Other					
	5-9	10-14	15-19	Total	5-9	10-14	15-19	Total	%	5-9	10-14	15-19	Total	%	Total % Minority
Mid-City	716	825	1,011	2,552	201	234	250	685	26.8	47	48	41	136	5.3	32.2
Glenbrook	679	862	924	2,465	145	177	166	488	19.8	40	46	37	123	5.0	24.8
East Side-Cove	685	771	905	2,361	112	131	107	350	14.8	37	40	47	124	5.3	20.1
Shippan	176	264	277	717	5	5	2	12	1.7	5	6	3	14	2.0	3.6
South End	237	276	329	842	136	178	200	514	61.0	40	30	37	107	12.7	73.8
Waterside	624	608	698	1,930	435	421	480	1,336	69.2	57	53	69	179	9.3	78.5
West Side	712	846	916	2,474	394	487	516	1,397	56.5	42	63	61	166	6.7	63.2
Westover	544	807	868	2,219	12	14	15	41	1.8	19	19	20	58	2.6	4.5
TOR/Newfield	379	560	616	1,555	7	12	12	31	2.0	9	13	9	31	2.0	4.0
Springdale	343	452	580	1,375	9	15	16	40	2.9	4	8	7	19	1.4	4.3
North Stamford	962	1,403	1,343	3,718	16	26	18	60	1.6	33	32	24	89	2.4	4.0
STAMFORD	6,057	7,684	8,467	22,208	1,472	1,700	1,782	4,954	22.3	333	358	355	1,046	4.7	27.0

Source: U.S. Department of Commerce, Bureau of the Census, 1980 Census of Population, (Washington, D.C.: U.S. Department of Commerce, Bureau of the Census, 1981).

STAMFORD PUBLIC POLICY IMPACT STUDY

FIGURE III-Two

Map of Stamford
Indicating Percent
Minority Projected in
School Age Population
(5-19 Year-Olds) for 1990

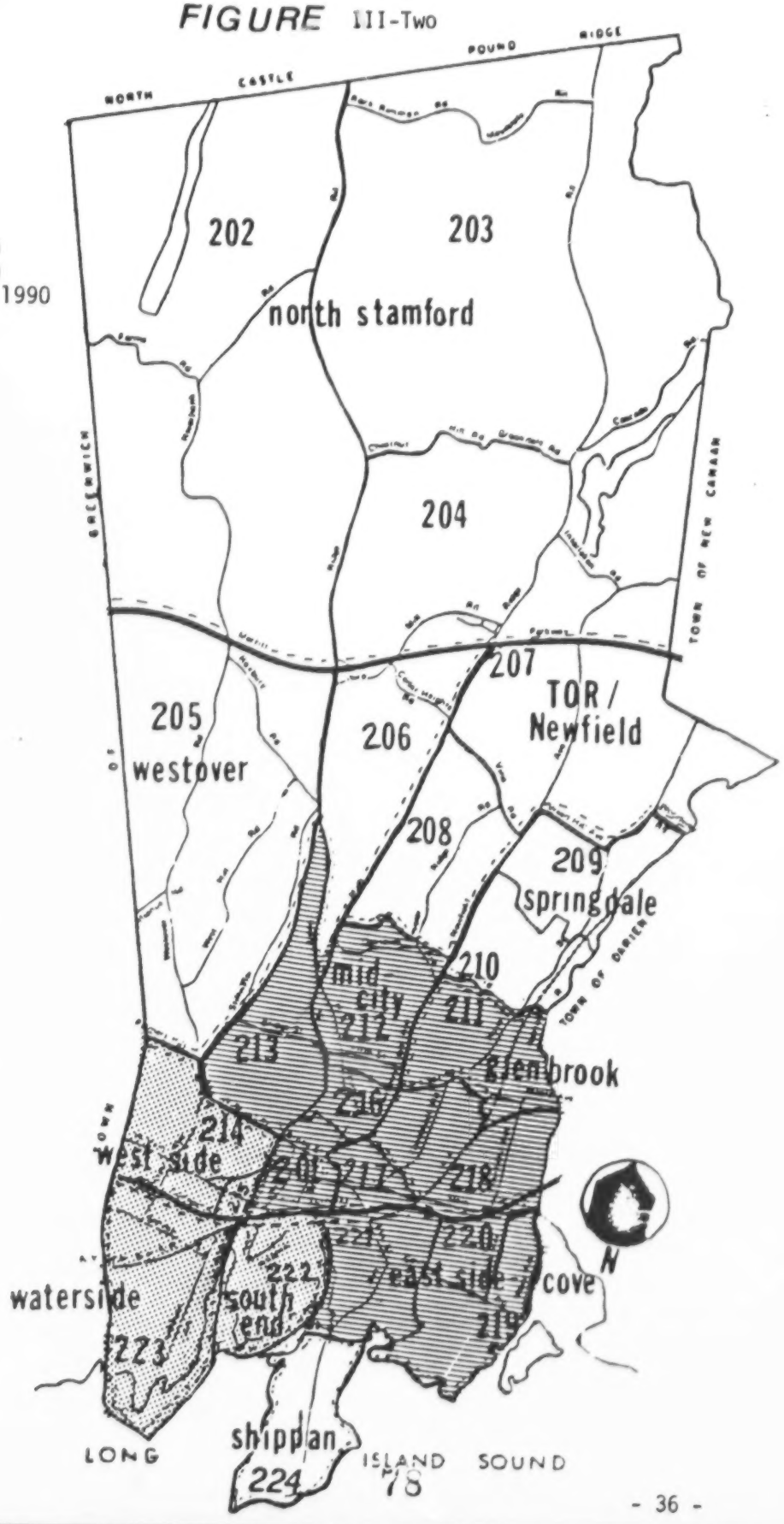


Table III-Twelve
Comparison of Percent Minority
in the 5-19 School Age Population
with the Percent Minority
in 5-17 School Age Population for 1980

Rank	Neighborhood	Percent Minority in School Age Population 5-19 Year-Olds	5-17 Year-Olds
1	Waterside	78.5	78.1
2	South End	73.8	74.1
3	West Side	63.2	63.3
4	Mid-City	32.2	32.9
*	STAMFORD	27.0	27.3
5	Glenbrook	24.8	25.3
6	East Side	20.1	20.6
7	Westover	4.5	4.6
8	Springdale	4.3	4.3
9	North Stamford	4.0	4.1
10	Turn of the River/Newfield	4.0	4.1
11	Shippan	3.6	3.9

STAMFORD EDUCATIONAL PUBLIC POLICY IMPACT STUDY

Table III-Thirteen
Percent of School Age Population
Attending Public Elementary and Middle Schools
by Neighborhood, 1980

Rank	Neighborhood	Percent of School Age Population in Public Schools - Elementary (K-6)
1	South End	86.9
2	Waterside	83.9
3	Glenbrook	83.2
4	Springdale	81.7
5	East Side-Cove	80.4
6	Turn of the River/Newfield	79.6
7	West Side	78.9
8	Westover	78.4
9	Mid-City	76.0
10	North Stamford	68.2
11	Shippan	67.9
	STAMFORD	78.1

Rank	Neighborhood	Percent of School Age Population in Public Schools - Middle School (7-8)
1	South End	87.5
2	Waterside	85.6
3	West Side	84.5
4	Glenbrook	78.3
5	Mid-City	77.5
6	Springdale	75.3
7	East Side-Cove	69.7
8	Turn of the River/Newfield	66.7
9	Westover	64.7
10	North Stamford	60.0
11	Shippan	46.1
	STAMFORD	72.0

75 percent or more in the public schools are all located in the northern neighborhoods with the exception of Shippan. As discussed earlier, Waterside, South End, and West Side have a large percentage of school age children. Whereas Springdale, with 81 percent of its children in public schools, has only a 4 percent minority school age population and Glenbrook, with 832 of its population in public schools, has a 25 percent minority school age population.

In the high school age population, there is a smaller range, 74 percent to 61 percent, in the eleven study neighborhoods (see Table III-Fourteen). One difference is noted in the South End and Waterside neighborhoods. In South End the percent of students in public schools falls from 87 percent at the public elementary and middle schools level to 64 percent at the high school level. Waterside dropped 10 percent to 74 percent in public high school. West Side also dropped 10 percent, while Glenbrook dropped 15 percent; Springdale, 19 percent; Turn of the River, 18 percent.

The description of the school age population distribution and the composition of Stamford provides the basis for an assessment of the future demand for schooling by neighborhood.

Needs Analysis

In each forecast needs assessment, three assumptions were applied to the formula below:

- that all children ages 5-17 in the neighborhood study area would attend public school
- that the same proportion of children ages 5-17 attend public schools as found in the 1981-1982 Stamford Public Schools; about 72.7 percent of the school age population overall
- that the number of children ages 5-17 attending private schools in 1981-1982 will be the same in 1990 and 2000.

Table III-Fourteen
Percent of School Age Population Attending Public High Schools, 1980

Rank	Neighborhood	% of High School Population in Public Schools
1	Waterside	74.4
2	Westover	72.9
3	West Side	69.7
4	Mid-City	68.7
5	Glenbrook	68.6
6	South End	64.3
7	East Side-Cove	63.5
8	Springdale	62.8
9	Turn of the River/Newfield	61.3
10	North Stamford	61.2
11	Shippan	61.1
	STAMFORD	66.5

The results of assessing need under each assumption vary considerably for each neighborhood study area. Thus, once the neighborhood level of need was established for 1990 and 2000 by age group for the elementary, middle, and high schools, the neighborhoods were ranked by the order of need, and by level of demand not met by the supply under Assumptions One, Two, and Three. The results from this needs analysis are presented in the next section of this chapter.

COMMUNITY NEEDS ASSESSMENT

Nominal Capacity of Schools	-	5-17 year-old school age resident population	=	Either (+) oversupply or (-) undersupply of seats
(Capacity)	-	(Service Population)	=	(Demand Level)

Findings

As stated on the preceding page, several assumptions were tested in the analysis of potential demand for schooling for the students of Stamford. The first assumption states that all school age children living in the study neighborhood will attend the public school located within their study neighborhood of residence. The second assumption is that the current proportion of students attending public school will be maintained. Under the third assumption it is assumed that the number of children ages 5-17 in private school in 1981-1982 will remain the same for the years 1990 and 2000. The three sets of numbers under these assumptions were compared to the nominal capacity of the public schools, so that patterns of school use could be ascertained.[4]

---

[4]Designated in the Educational Planning Committee Reference Materials, Volume II (January 4, 1982).

The projected school enrollment for 1990 and the year 2000 has been organized in Table III-Fifteen to show elementary, middle school, and high school age cohorts under each assumption. Between 1990 and the year 2000 there will be a slight decrease in elementary enrollment citywide. Only Waterside and West Side show slight increases. Enrollment projections for middle school and high school, however, show an increase. This is apparent under all three assumptions. In certain neighborhoods, the population decreases slightly more when students leave elementary school for middle school and then again from middle school to high school. According to private school enrollment figures for the 1981-1982 school year (used to determine assumption three) the percentage of resident students projected not to be in public schools in 1990 is 22 percent for the elementary level and 39 percent and 44 percent for middle and high schools, respectively.

A summary of the projected school enrollment shows that the total number of potential school age population in 1990 in elementary school is 8,233 under Assumption One; 6,502 under Assumption Two; and 6,410 under Assumption Three; for middle school it is 1,952; 1,458; and 1,183, respectively; and for high school it is 4,174; 2,798; and 1,851. For the year 2000, elementary school projections are 7,436; 5,876; and 5,613, while middle school projections are 2,182; 1,691; and 1,413. High school figures under Assumption One, Two, and Three are 4,478; 3,019; and 2,155.

Tables III-Sixteen to III-Eighteen show assessment of need based upon Assumption One enrollment figures and nominal capacities of each school by level and, for elementary schools, by neighborhood. The 1990 projected population elevation (5-11 year-olds) is 8,233. Thus, under Assumption One, there will be a projected demand for about 825 additional seats. The middle

Table III-Fifteen
PROJECTED SCHOOL ENROLLMENT, 1990 AND 2000

Neighborhood Study Area	Assumption 1[a]						Assumption 2[b]						Assumption 3[c]					
	1990			2000			1990			2000			1990			2000		
	K-6	7-8	9-12	K-6	7-8	9-12	K-6	7-8	9-12	K-6	7-8	9-12	K-6	7-8	9-12	K-6	7-8	9-12
Mid-City	1,397	282	524	1,073	342	772	1,061	218	361	815	265	531	1,174	208	285	850	268	533
Glenbrook	1,116	253	482	877	270	587	926	197	331	728	211	403	947	187	249	708	204	354
East Side-Cove	1,032	235	470	797	250	537	829	164	298	640	174	341	851	148	238	616	163	305
Shippan	157	38	105	150	42	79	107	18	64	102	19	48	80	-11	17	73	-7	-9
South End	425	111	197	438	124	255	369	97	127	381	108	164	383	102	107	396	115	165
Waterside	769	186	473	960	260	497	645	159	352	805	223	362	657	155	335	848	229	349
West Side	1,165	269	548	1,189	347	703	919	227	384	938	293	490	952	221	298	976	299	453
Westover	537	144	338	481	135	262	421	93	244	377	87	189	367	43	125	311	34	69
TOR/Newfield	370	102	236	340	94	178	294	68	145	270	63	109	261	40	44	231	32	-14
Springdale	507	118	225	363	114	249	414	89	141	296	86	156	414	76	69	270	72	93
North Stamford	758	214	576	768	204	369	517	128	352	524	122	226	324	14	84	334	4	-123
Stamford	8,233	1,952	4,174	7,436	2,182	4,478	6,502	1,458	2,799	5,876	1,651	3,019	6,410	1,183	1,851	5,613	1,413	2,155

Source: Stamford Educational Public Policy Impact Study Team, SEPPIS Study Team Projections, 1982.

Note:
a All students attend public schools.
b Same percentage of students by neighborhood and school level will attend public schools in 1990 and 2000 as in the year 1982.
c Same number of student will attend private school in 1990 and 2000 as in the year 1982.

Table III-Sixteen
NEEDS ANALYSIS BY NEIGHBORHOOD BASED ON ASSUMPTION ONE (ELEMENTARY LEVEL)

Neighborhood Study Area	School	Capacity [a]	1990 Projected Population (5-11) [b]	Projected Demand [c]	2000 Projected Population (5-11) [b]	Projected Demand [c]
Mid-City	Hart Elem.	294	1,397	(1,103)	1,073	(779)
Glenbrook	Stark Elem.	565	1,116	(551)	877	(312)
East Side-Cove	Rogers Elem. Murphy Elem.	760 441				
	Subtotal	1,201	1,032	+169	797	+404
Shippan	0	0	157	(157)	150	(150)
South End	0	0	425	(425)	438	(438)
Waterside	0	0	769	(769)	960	(960)
West Side	Westover Elem.	437	1,165	(728)	1,189	(752)
Westover	Roxbury Elem. Stillmeadow Elem.	583 717				
	Subtotal	1,300	537	+763	481	+819
TOR/Newfield	Davenport Newfield	721 524				
	Subtotal	1,245	370	+875	340	+905

Table III-Sixteen (cont.)

Needs Analysis by Neighborhood Based on Assumption One (Elementary Level)

Neighborhood Study Area	School	Capacity[a]	1990 Projected Population (5-11) [b]	Projected[c] Demand	2000 Projected Population (5-11) [b]	Projected[c] Demand
Springdale	Toquam	560				
	Springdale	542				
	Subtotal	1,102	507	+595	363	+739
North Stamford	Riverbank	487				
	Northeast	777				
	Subtotal	1,264	758	+506	768	+496
STAMFORD	TOTAL	7,408	8,233	(825)	7,436	(28)

Source: Stamford Educational Public Policy Impact Study Team: SEPPIS Study Team Projections, July 15, 1982.

[a] Educational Planning Committee Reference Materials, Volume II, 1982.

[b] Based on Assumption One which assumes that all school age students will attend public schools.

[c] + = excess seats available
() = need for seats

Table III-Seventeen

NEEDS ANALYSIS BY NEIGHBORHOOD BASED ON ASSUMPTION ONE (MIDDLE SCHOOL LEVEL)

Neighborhood Study Area	School	Capacity[a]	1990 Projected Population (12-13) b	Projected Demand c	2000 Projected Population (12-13) b	Projected Demand c
Mid-City	Cloonan Middle	894	282		342	
Glenbrook			253		270	
East Side-Cove			235		270	
Shippan			38		42	
South End			111		124	
West Side			186		260	
Westover			144		135	
TOR/Newfield	Turn of River	705	102		94	
Springdale	Dolan	652	118		114	
North Stamford		214			204	
STAMFORD		2,251	1,952	+299	2,182	+69

Source: Stamford Public Policy Impact Study Team: SPPIS Study Team Projections, July 15, 1982.

[a]Educational Planning Committee Reference Materials, Volume II, 1982.

[b]Based on Assumption One which assumes that all school age children will attend public school.

[c] + = excess seats available
() = need for seats

Table III-Eighteen
NEEDS ANALYSIS BY NEIGHBORHOOD BASED ON ASSUMPTION ONE (HIGH SCHOOL LEVEL)

Neighborhood Study Area	School	Capacity[a]	1990 Projected Population (14-17) [b]	Projected Demand [c]	2000 Projected Population (14-17) [b]	Projected Demand [c]
	Rippowam	1,384				
	Stamford	1,973				
	Westhill	2,207				
	Total	5,564 [d]		+1,390		+1,086
		4,180 [e]		+6		(298)
STAMFORD	TOTAL		4,174		4,478	
Neighborhoods:						
Mid-City			52		772	
Glenbrook			482		587	
East Side-Cove			470		537	
Shippan			105		79	
South End			197		255	
Waterside			473		487	
West Side			548		703	
Westover			338		262	
TOR/Newfield			236		178	

Table III-Eighteen (cont.)

Needs Analysis by Neighborhood Based on Assumption One (High School Level)

Neighborhood Study Area	School	Capacity [a]	1990 Projected Population (14-17) [b]	Projected Demand [c]	2000 Projected Population (14-17) [b]	Projected Demand [c]
Neighborhoods (Continued)						
Springdale			225		249	
North Stamford			576		369	

Source: Stamford Educational Public Policy Impact Study Team: SEPPIS Study Team Projections, July 15, 1982.

Notes: [a] Educational Planning Committee Reference Materials, Volume II, 1982.

[b] Based on Assumption One which assumes that all school age children will attend public schools.

[c] + = excess seats available
() = need for seats

[d] Vocational school capacity figures not included.

[e] Total Need without Rippowam.

school capacity is 2,251 seats which is 299 greater than the projected enrollment. The high school projected demand is 4,175 for 14-17 year-olds or a surplus of 1,390 if Rippowam is open and a surplus of 6 seats if it is closed.

Under Assumption Two, which is that the proportion of students attending public schools in 1981-1982 will remain the same, the total 1990 projected elementary population is 6,502 indicating a demand surplus of 951 seats. In the year 2000, the projected population is 5,876 showing a projected demand surplus of about 1,500 seats if no schools are closed prior to that year. The middle schools projected population for 1990 is 1,458, a demand surplus of about 800, while 2000 population of 1,651 indicates a demand surplus of 600 seats, 200 more seats needed than 1990. The high school projected population is 2,799 for 1990, a surplus demand of either 2,765 or 1,381 will result if Rippowam is open or closed. In the year 2000, the projected high school population increases to 3,019 creating a surplus demand of 2,545 if Rippowam is open and 1,161 if it is closed (Tables III-Nineteen to III-Twenty-One).

Under Assumption Three, which is that the number of children in private school is constant, the projected population for elementary schools in 1990 is 6,410 which indicates a demand surplus of about 1,000 seats. In 2000, a population of 5,613 will increase that surplus to about 1,800 seats if no schools are closed in 1990. The middle school projected population is 1,183 indicating a demand surplus of 1,068 in 1990 and 838 in 2000 for a population of 1,413.

As for the high schools under Assumption Three, the 1990 projected population of 1,851 indicates a demand surplus of 3,713 or 2,329 depending on whether Rippowam is open or closed. In 2000, the projected figure is 2,155 which is 3,409 less than the total number of seats provided there are three

Table III-Nineteen
NEEDS ANALYSIS BY NEIGHBORHOOD BASED ON ASSUMPTION TWO (ELEMENTARY LEVEL)

Neighborhood Study Area	School	Capacity[a]	1990 Projected Population (5-11) [b]	Projected Demand [c]	2000 Projected Population (5-11) [b]	Projected Demand [c]
Mid-City	Hart Elem.	294	1,061	(767)	815	(521)
Glenbrook	Stark Elem.	565	926	(361)	728	(163)
East-Side Cove	Rogers Elem.	760				
	Murphy Elem.	441				
	Subtotal	1,201	829	+372	640	+561
Shippan	0	0	107	(107)	102	(102)
South End	0	0	369	(369)	381	(381)
Waterside	0	0	645	(645)	805	(805)
West Side	Westover Elem.	437	919	(482)	938	(501)
Westover	Roxbury Elem.	583				
	Stillmeadow Elem.	717				
	Subtotal	1,300	421	+879	377	+923
TOR/Newfield	Davenport Elem.	721				
	Newfield Elem.	524				
	Subtotal	1,245	294	+951	270	+975

Table III-Nineteen (cont.)

Needs Analysis by Neighborhood Based on Assumption Two (Elementary Level)

Neighborhood Study Area	School	Capacity [a]	1990 Projected Population (5-11) [b]	Projected Demand [c]	2000 Projected Population (5-11) [b]	Projected Demand [c]
Springdale	Toquam	560				
	Springdale	542				
	Subtotal	1,102	414	+688	296	+806
North Stamford	Riverbank	487				
	Northeast	777				
	Subtotal	1,264	517	+747	524	+740
STAMFORD	TOTAL	7,408	6,502	+906	5,876	+1,532

Source: Stamford Educational Public Policy Impact Study Team: SEPPIS Study Team Projections, July 15, 1982.

Notes: [a]Educational Planning Committee Reference Materials, Volume II, 1982.

[b]Based on Assumption Two which assumes that the same percentage of students will attend public schools in 1990 and 2000 as in the year 1982.

[c]+ = excess seats available
() = need for seats

Table III-Twenty

NEEDS ANALYSIS BY NEIGHBORHOOD BASED ON ASSUMPTION TWO (MIDDLE LEVEL)

Neighborhood Study Area	School	Capacity[a]	1990 Projected Population (12-13)[b]	Projected Demand[c]	2000 Projected Population (12-13)[b]	Projected Demand[c]
Mid-City	Cloonan	894	218		265	
Glenbrook			197		211	
East Side-Cove			164		174	
Shippan			18		19	
South End			97		108	
Waterside			159		223	
West Side			227		293	
Westover			93		87	
TOR/Newfield	Turn of River	705	68		63	
Springdale	Dolan	652	89		86	
North Stamford			128		122	
STAMFORD	TOTAL	2,251	1,458	+793	1,651	+600

Source: Stamford Educational Public Policy Impact Study Team: SEPPIS Study Team Projections, July 15, 1982.

Notes: [a] Educational Planning Committee Reference Materials, Volume II, 1982.

b Based on Assumption Two which assumes that the same percentage of students will attend public schools in 1990 and 2000 as in the year 1982.

[c] + = excess seats available
() = need for seats

Table III-Twenty-One

NEEDS ANALYSIS BY NEIGHBORHOOD BASED ON ASSUMPTION TWO (HIGH SCHOOL LEVEL)

Neighborhood Study Area	School	Capacity[a]	1990 Projected Population (14-17) [b]	Projected Demand [c]	2000 Projected Population (14-17) [b]	Projected Demand [c]
	Rippowam	1,384				
	Stamford	1,973				
	Westhill	2,207 [d]				
	Total	5,564 [e]		+2,765		+2,545
		4,180		+1,381		+1,161
STAMFORD	TOTAL		2,799		3,019	
Neighborhoods:						
Mid-City			361		531	
Glenbrook			331		403	
East Side-Cove			298		341	
Shippan			64		48	
South End			127		164	
Waterside			352		362	
West Side			384		490	
Westover			244		189	
TOR/Newfield			145		109	

Table III-Twenty-One (cont.)

Needs Analysis by Neighborhood Based on Assumption Two (High School Level)

Neighborhood Study Area	School	Capacity	1990 Projected Population (14-17)	Projected Demand	2000 Projected Population (14-17)	Projected Demand
Neighborhoods (Continued)						
Springdale			141		156	
North Stamford			352		226	

Source: Stamford Educational Public Policy Impact Study: SEPPIS Study Team Projections, July 15, 1982.

Notes: [a] Educational Planning Committee Reference Materials. Volume II. 1982.

[b] Based on Assumption Two which assumes that the same percentage of students will attend public schools in 1990 and 2000 as in the year 1982.

[c] + = excess seats available
() = need for seats

[d] Vocational school capacity figures not included.

[e] Total Need without Rippowam.

high schools. If Rippowam is closed this surplus decreases to 2,025 (see Tables III-Twenty-Two to III-Twenty-Four).

A review of the citywide density pattern for the years 1990 and 2000 under Assumption Two shows elementary schools in the southwest section of the city (West Side, Glenbrook, Mid-City, South End, Waterside, and Shippan) have a projected need or deficiency in seats, while the northern and eastern sections (North Stamford, Westover, Springdale, and Turn of the River/Newfield) have a surplus of seats. Tables III-Twenty-Five to III-Twenty-Seven rank each neighborhood's demand for elementary schools under all three assumptions in 1990 and 2000.

Summary

An examination of the demand for schooling under the three assumptions within the context of the finding of the comprehensive planning process indicates that Assumption Two (the same proportion of children, ages 5-17, who currently attend public school will continue to do so in 1990 and the year 2000) is the approximate assumption for projecting demand for schooling. Volume II describes the social and physical environment of Stamford currently and in the next two decades. Based upon that analysis, the demand for schooling shows that there will be a surplus of approximately 900 seats in the year 1990 for the elementary schools, grades K-6; and a surplus of about 1,500 seats in the year 2000 if no schools are closed prior to this time. The middle school, grades 7-8, show surplus seats of about 800 for 1990; if the 800 seat capacity is closed prior to the year 2000, there will be a deficit of about 200 seats at that time. The high schools demand is projected at a surplus of 2,767 with Rippowam open and 1,381 with it closed. In the year 2000, using the same capacity figures, there will be an increased demand for seats; 2,545 surplus seats with Rippowam open and 1,161 seats with Rippowam closed.

Table III-Twenty-Two
NEEDS ANALYSIS BY NEIGHBORHOOD BASED ON ASSUMPTION THREE (ELEMENTARY LEVEL)

Neighborhood Study Area	School	Capacity [a]	1990 Projected Population (5-11) [b]	Projected Demand [c]	2000 Projected Population (5-11) [b]	Projected Demand [c]
Mid-City	Hart Elem.	294	1,174	(880)	850	(556)
Glenbrook	Stark	565	947	(382)	708	(143)
East Side-Cove	Rogers	760				
	Murphy	441				
	Subtotal	1,201	851	+350	616	+585
Shippan	0	0	80	(80)	73	(73)
South End	0	0	383	(383)	396	(396)
Waterside	0	0	657	(657)	848	(848)
West Side	Westover	437	952	(515)	976	(539)
Westover	Roxbury	583				
	Stillmeadow	717				
	Subtotal	1,300	367	+933	311	+989
TOR/Newfield	Davenport	721				
	Newfield	524				
	Subtotal	1,245	261	+984	231	+1,014

Table III-Twenty-Two (cont.)

Needs Analysis by Neighborhood Based on Assumption Three (Elementary Level)

Neighborhood Study Area	School	Capacity [a]	1990 Projected Population (5-11) [b]	Projected Demand [c]	2000 Projected Population (5-11) [b]	Projected Demand [c]
Springdale	Toquam	560				
	Springdale	542				
	Subtotal	1,102	414	+688	270	+832
North Stamford	Riverbank	487				
	Northeast	777				
	Subtotal	1,264	324	+940	334	+930
STAMFORD	TOTAL	7,408	6,410	+998	5,613	+1,795

Source: Stamford Educational Public Policy Impact Study: SEPPIS Study Team Projections, July 15, 1982.

Notes: [a] Educational Planning Committee Reference Materials, Volume II, 1982.

[b] Based on Assumption Three which assumes that the same number of students will attend private school in 1990 and 2000 as in the year 1982.

[c] + = excess seats available
() = need for seats

Table III-Twenty-Three
NEEDS ANALYSIS BY NEIGHBORHOOD BASED ON ASSUMPTION 3 (MIDDLE LEVEL)

Neighborhood Study Area	School	Capacity [a]	1990 Projected Population (12-13) [b]	Projected Demand [c]	2000 Projected Population (12-13) [b]	Projected Demand [c]
Mid-City	Cloonan	894	208		268	
Glenbrook			187		204	
East Side-Cove			148		163	
Shippan			-11		-7	
South End			102		115	
Waterside			155		229	
West Side			221		299	
Westover			43		34	
TOR/Newfield	Turn of River	705	40		32	
Springdale	Dolan	652	76		72	
North Stamford			14		4	
STAMFORD		2,251	1,183	+1,068	1,413	+838

Source: Stamford Educational Public Policy Impact Study: SEPPIS Study Team Projections, July 15, 1982.

Notes:
[a] Educational Planning Committee Reference Materials, Volume II, 1982.

[b] Based on Assumption Three which assumes that the same number of students will attend private school in 1990 and 2000 as in the year 1982.

[c] + = excess seats available
() = need for seats

Table III-Twenty-Four

NEEDS ANALYSIS BY NEIGHBORHOOD BASED ON ASSUMPTION THREE (HIGH SCHOOL LEVEL)

Neighborhood Study Area	School	Capacity [a]	1990 Projected Population (14-17) [b]	Projected Demand [c]	2000 Projected Population (14-17) [b]	Projected Demand [c]
	Rippowam	1,384				
	Stamford	1,973				
	Westhill	2,207				
	Total	5,564 [d]		+3,713		+3,409
		4,180 [e]		+2,329		+2,025
STAMFORD	TOTAL		1,851		2,155	
Neighborhoods:						
Mid-City			285		533	
Glenbrook			249		354	
East Side-Cove			238		305	
Shippan			17		-9	
South End			107		165	
Waterside			335		349	
West Side			298		453	
Westover			125		49	
TOR/Newfield			44		-14	

Table III-Twenty-Four (cont.)

Needs Analysis by Neighborhood Based on Assumption Three (High School Level)

Neighborhood Study Area	School	Capacity [a]	1990 Projected Population (14-17) [b]	Projected Demand [c]	2000 Projected Population (14-17) [b]	Projected Demand [c]
Neighborhoods (Continued)						
Springdale			69		93	
North Stamford			84		-123	

Source: Stamford Educational Public Policy Impact Study: SEPPIS Study Team Projections, July 15, 1982.

Notes: [a] Educational Planning Committee Reference Materials, Volume II, 1982.

[b] Based on Assumption Three which assumes that the same number of students will attend private school in 1990 and 2000 as in the year 1982.

[c] + = excess seats available
() = need for seats

[d] Vocational school capacity figures not included.

[e] Total Need without Rippowam.

STAMFORD EDUCATIONAL PUBLIC POLICY IMPACT STUDY

Table III-Twenty-Five
Neighborhood Study Areas Ranked by Forecasted Order of Need for Elementary School Facilities Based on Assumption One

Rank	Neighborhood	1990[a]	Neighborhood	2000[a]
1	Mid-City	(1,103)	Waterside	(960)
2	Waterside	(769)	Mid-City	(779)
3	West Side	(728)	West Side	(752)
4	Glenbrook	(551)	South End	(438)
5	South End	(425)	Glenbrook	(312)
6	Shippan	(167)	Shippan	(150)
7	East Side Cove	169	East Side Cove	404
8	No. Stamford	506	No. Stamford	496
9	Springdale	595	Springdale	739
10	Westover	763	Westover	819
11	TOR/Newfield	875	TOR/Newfield	905

Source: Stamford Educational Public Policy Impact Study Team: SEPPIS Study Team Projections, July 15, 1982.

Note: [a](Decrease), increase

STAMFORD EDUCATIONAL PUBLIC POLICY IMPACT STUDY

Table III-Twenty-Six
Neighborhood Study Areas Ranked by Forecasted Order of Need for Elementary School Facilities Based on Assumption Two

Rank	Neighborhood	1990[a]	Neighborhood	2000
1	Mid-City	(767)	Waterside	(805)
2	Waterside	(645)	Mid-City	(521)
3	West Side	(483)	West Side	501
4	South End	(369)	South End	(381)
5	Glenbrook	(361)	Glenbrook	(163)
6	Shippan	(107)	Shippan	(102)
7	East Side Cove	372	East Side Cove	561
8	Springdale	688	No Stamford	740
9	No Stamford	747	Springdale	806
10	Westover	879	Westover	923
11	TOR/Newfield	851	TOR/Newfield	973

Source: Stamford Educational Public Policy Impact Study Team: SEPPIS Study Team Projections, July 15, 1982.

Note: [a](Decrease), increase

STAMFORD EDUCATIONAL PUBLIC POLICY IMPACT STUDY

Table III-Twenty-Seven
Neighborhood Study Areas Ranked by Forecasted Order of Need for Elementary School Facilities Based on Assumption Three

Rank	Neighborhood	1990[a]	Neighborhood	2000
1	Mid-City	(880)	Waterside	(848)
2	Waterside	(657)	Mid-City	(556)
3	West Side	(515)	West Side	(539)
4	South End	(385)	South End	(396)
5	Glenbrook	(382)	Glenbrook	(143)
6	Shippan	(80)	Shippan	(73)
7	East Side Cove	350	East Side Cove	585
8	Springdale	688	Springdale	832
9	Westover	933	No Stamford	930
10	No Stamford	940	Westover	989
11	TOR/Newfield	984	TOR/Newfield	1,014

Source: Stamford Educational Public Policy Impact Study Team: SEPPIS Study Team Projections, July 15, 1982.

Note: [a](Decrease), increase

IV. FACILITIES UTILIZATION STRATEGIES

Educational Goals and Policy Assumptions

Educational goals and policy assumptions provide an analytic framework for an assessment of facilities and their utilization. The goals and the policy assumptions which follow were identified initially from meetings with the Stamford Educational Planning Committee and members of the Stamford Board of Education, Stamford teachers, administrators, students, parents, and community members. They were then further examined by a review of the Stamford School System Planning Reports for the last five years; finally, they were documented at meetings held in September and October, 1982 and through the Subcommittee reports of the Educational Planning Committee presented on October 28, 1982. The goals and policy assumptions have been utilized as the basis of the criteria for assessing the information gathered for the facilities analysis and for the development of the policy recommendations. The policy options reflect these policy assumptions. Since there may be potential discrepancy in any set of goals and policy assumptions, the Stamford Board of Education and the community should weigh the impact of each against the other when final facilities utilization decisions are made. The educational goals are to maximize cost-effective, desegregated, quality education in an optimum learning environment and to prepare students to function successfully as citizens, family members, parents, workers and consumers. The policy assumptions are:

- reasonable and equitable racial balance
- academic balance and feeder pattern continuity
- student access to an appropriate educational program
- safe, sound, and environmentally fit facilities
- adequate space and resources for advanced curriculum
- provision of orderly and timely reduction of surplus capacity
- maximization of quality educational experience
- provision of services to meet the needs of all students in the school system, reduction of out-of-school system placement
- minimization of student disruption by continuity through the grades in the same school
- minimization of social/neighborhood disruption
- preservation of neighborhood orientation
- provision of equitable distribution and cost-efficient transportation

Criteria for Decision Making

There are three major decision criteria which themselves encompass a large number of factors upon which determination about facilities will be made. The criteria respond to the issues, concerns, and trends raised in the Policy Impact Analysis, and, specifically, to the educational goals and policy assumptions stated earlier in this chapter. By and large, these indicators have been quantified as a way to measure their impact on the policy process.

The three major elements are:

Demographic Analysis: The number, race, and spatial distribution of school age children, ages 5-17, relating to equality and access in 1990 and 2000.

Physical Plant Assessment: Adjusted capacity, surrounding environment, community use, potential for community use, potential for conversion to alternative use, and long term capital liability.

Fiscal Measures: Magnitude of savings, specific types of investments, and a comparable relative efficiency of different structures.

When developing the decision matrix other elements which must be considered are social conditions of the neighborhood and the proximate land uses of the physical plant.

The weighted matrix for decision making is as follows:

Elements	Weight
Demographic Analysis	35
Physical Plant	25
Fiscal Measures	25
Social conditions	10
Proximate land use	05
Total	100 percent

Demographic Analysis

The decision criteria of demographic analysis have been discussed in Chapters Two and Three. Each indicator is examined by neighborhood; all of the neighborhoods are grouped according to census tracts. The specific indicators are:

- percent of total school age population by neighborhood in 1980, ranked for the city
- size of school age population in 1980, ranked by neighborhood
- percent of school age population in public schools, ranked by neighborhood
- percent of minorities in school age population, ranked
- percent of change in 1980 to 1990 population, ranked for the city
- need for schooling by neighborhood, ranked

The number of the school age children projected for the years 1990 and 2000 is:

Projected Number of School Age Children for Years 1990 and 2000

School Age	1990	2000
K-6	8,233	7,436
7-8	1,952	2,182
9-12	4,174	4,478
Total	14,359	14,096

The South End, Waterside, and West Side, clustered in the southwest of the city will gain population; East Side-Cove, Glenbrook, Mid-City, and Springdale will lose less than 10 percent and Shippan, Westover, North Stamford, and Turn of the River/Newfield will lose slightly more than 10 percent. However, there are very recent changes in housing in North Stamford, and possibly Westover, which may ameliorate this decline. The minority population in Stamford will grow from 18.5 percent to 25.8 percent in 1990,

to potentially 34 percent in the year 2000. This will be the trend of natural increase if the housing market does not intervene. Neighborhood composition varies tremendously in 1980 from a low of 3 percent in Turn of the River, Westover, North Stamford, and Shippan; to a mid-range of between 12-20 percent in Mid-City, Glenbrook, East Side-Cove; to a high of 66 percent and over in South End, Waterside, and West Side. In 1990 and 2000, all neighborhoods will increase their minority population slightly, but there will be no real distribution changes unless there is a change in the housing pattern. Again, those neighborhoods with the largest minority population are the largest growth neighborhoods and are grouped in the southwestern section of the city. If the housing market trends continue, however, it is highly possible that the minority population will decrease and as it does, so will public school enrollment.

The spatial distribution of the school age population follows this general pattern as described in detail in Chapter Two.

Facilities Analysis: The Supply of Public Education in a Long Range Facilities Plan

The relationship of physical facilities to the long term educational goals of the city is a crucial concern, particularly in a climate of declining enrollment. The purpose of the facilities plan is to assemble available information regarding the nature, scope, and condition of existing facilities and to compare this information with the long term academic objectives of the system (see Table IV-One).

The evaluation of facilities has been organized according to the present use categories which are K-6, middle, and high schools. At this time, no changes in the grade organization are expected. Grade reorganization would, of course, have a significant impact on long term facilities utilization plans.

STAMFORD EDUCATIONAL PUBLIC POLICY IMPACT STUDY

TABLE IV-ONE

BASIC FACILITIES DATA

School	Neighborhood	Capacity	1982 Enrollment	Date of Construction	Date of Renovation
Davenport Ridge	Turn of the River	684	646	1972	-
Hart	Mid City	424	362	1915	1962
Murphy	East Side Cove	464	479	1900	1922, 1956
Newfield	Turn of the River	524	460	1954	-
Northeast	North Stamford	772	611	1966	-
Riverbank	North Stamford	418	377	1962	-
Rogers	East Side Cove	667	623	1889	1904,1915,1922,1962 1964,1974
Roxbury	Westover	537	440	1955	1959,1964
Springdale	Springdale	551	491	1919,1920 1956	1974
Stark	Glenbrook	551	526	1927	1953, 1970
Stillmeadow	Westover	777	742	1972	-
Toquam	Springdale	643	600	1967	-
Westover	West Side	383	364	1955	-
Cloonan	Mid City	868	792	1967	-
Dolan	Springdale	692	630	1949	-
Turn of the River	Turn of the River	730	648	1963	-
Rippowam	Turn of the River	1384	745	1961	-
Stamford	Glenbrook	1984	1523	1928	1967
Westhill	Westover	2215	1966	1971	-

Evaluation criteria. The evaluation of facilities is seen as a rational process in which facilities are compared with one another and in some cases, with established criteria (see Table IV-Two). For the most part, the evaluations are either a direct result of past surveys or the indirect result of these surveys, in that past data have been combined to produce new indicators of facility potential, effectiveness, etc. The principal criteria used in the analysis are:

- Model capacity - All schools from elementary to high schools have seen academic programs change and evolve. As these changes have occurred, various modifications have been required in the physical organization and utilization of interior space. In many cases, these modifications have had the effect of changing the capacity of the building. It is expected that future programs and techniques will arise and that space will have to be provided. When the required space is of a specialized nature that is inappropriate for general classroom occupancy, the net effect can be a reduction in the capacity of the school.
- Surrounding environment - When evaluating a particular category of school facility it is helpful to be aware of the general setting of the school in locational terms. The Assessment Project of 1978 described the environmental setting of each school according to the surrounding land use. Implicit in this description is the evaluation of the reliability of the location as a function of the compatibility of surrounding activity with educational use (see Table IV-Three).

Table IV-Two
Evaluative Criteria for Facilities Analysis

I. First Order Evaluative Criteria	II. Second order Implicit Criteria	III. Third Order Implicit Criteria
Adjusted capacity	Impact of satisfying space and functional standards	Relationship to elementary comparative models Impact of specific concerns of curriculum specialists
Surrounding environment	Compatability of land use with use of school for educational purposes	
Community use	Level of integration of school into public affairs	
Potential for community use	Level of potential based on site, planning and physical issues	Site: location, transportation, expansion potential, parking, outdoor space. Planning: separate entries, on grade entries, access, plan flexibility existing plan and circulation, room sizes, special facilities Physical: # of stories, size, condition, structural flexability, code requirements interior conditions, exterior conditions, mecnanical systems, rehabilitation costs.
Potential for conversion to alternative use	Same as for community use, but weighting system	Same as for community use, but weighting system different

Table IV-Two (cont.)

Evaluative Criteria for Facilities Analysis

I. First Order Evaluative Criteria	II. Second Order Implicit Criteria	III. Third Order Implicit Criteria
Long term capital need	Margin of improvement required to upgrade structure Level of adjustment required to accomodate needs of comparative models Level of adjustment required to resolve long term functional deficiencies	Physical condition of: structure exterior, floors, walls, ceilings, furnishings, plumbing, electrical, lighting, heating, ventilating, air conditioning, site Gross area of facility

STAMFORD EDUCATIONAL PUBLIC POLICY IMPACT STUDY

Table IV-Three
Facilities Decision Matrix, Part I

School	Adjusted Capacity	Enviornment (Surrounding)	Community Role Community Use	Conversion for Adaptive Reuse		Long Term Capital Need
				Community	Conversion	Rank
Davenport Ridge	644	Excellent Suburban	Limited Community Use	29	10	11
Hart	322	Urban Fair	Heavy use by clubs & organizations	26	6	10
Murphy	322	Urban Fair	Limited community use but significant involvement in school	23	5	6
Newfield	322	Suburban Excellent	Heavy use and community involvement (sports)	29	8	5
Northeast	644	Suburban Excellent	Very limited community use and involvement	29	8	3
Riverbank	483	Rural Excellent	Limited community use and involvement	22	2	12
Rogers	644	Urban Good	Heavy community use and involvement	27	9	13
Roxbury	483	Suburban Excellent	Very heavy community use and involvement	30	9	2
Stark	483	Suburban Excellent	Heavy community use and involvement	29	4	7
Springdale	483	Suburban Good	Heavy community use and involvement	27	3	4
Stillmeadow	644	Suburban Excellent	Heavy community use & involvement	25	4	9
Toquam	483	Suburban Excellent	occassional use only Band rehearsals & P.T.A.	18	6	8
Westover	483	Suburban Good	Playground & gym used light	31	11	1

Table IV-Three
Facilities Decision Matrix, Part II

School	Adjusted Capacity	Environment (Surrounding)	Community Role (Community Use)	Conversion for Adaptive Reuse	Long Term Capital Need
Cloonan	809	Urban, Excellent	Moderate community use (gym and auditorium) 42	14	2,928,600
Dolan	517	Suburban, Good	Moderate community use (sp rts, senior citizens) 32	5	5,650,400
Turn of the River	655	Suburban, Excellent	Heavy community use 34	9	1,640,800
Rippowam	1364	Suburban, Excellent	Adult education, library, sports and auditorium 41	15	3,643,200
Stamford	1900	Suburban, Good	Heavy use of classroom space 45	17	7,961,200
Westhill	2177	Suburban, Excellent	Auditorium used 46	16	3,328,000

- Community use - The importance of a school as a nonacademic site, the role which the school has in the cultural and civic affairs of the community, is also assessed. In the case of the architectural assessments prepared in 1978, it was noted at that time whether the facility played an active part in the after hours affairs of the community, i.e., sports programs, P.T.A., and elderly functions. Table IV-Three displays this data.
- Potential community use - Each facility was evaluated in 1978 to determine its inherent potential for community services. A wide assortment of criteria depicting site, planning, and facilities issues were used to determine the specific potential for a range of fifteen possible community service functions. These scores have been combined to produce an overall score of functional potential (see Table IV-Three).
- Potential for conversion - Similar to the community service issue, each school was evaluated according to its potential for conversion to another use and occupancy. This rating should be of interest in the cases where a school is a candidate for closing and would become a surplus facility (see Table IV-Three).
- Long term capital need - If it is assumed that the present facilities will become the inventory of schools for the future, then a realistic concern is to what extent their present conditions will incur costs for the system in the future. The architectural assessment of 1978 evaluated each facility against a comprehensive list of physical criteria. Each school received a score based on a possible maximum of 100. The difference between the maximum and

the observed score constitutes the margin of improvement which could be required if each school was hypothetically upgraded. The product of the gross area of the school and the margin of improvement is a numerical value which can be interpreted as the long term capital liability of the facility. The number has no direct meaning (in terms of dollars), but it is appropriate for use in comparing facilities to one another (see Table IV-Three).

- K-6 facilities - The present K-6 schools consist of a roster of 13 facilities of varying sizes, age, and capacity. Due to the enormous physical variation it was necessary to standardize the existing data as much as possible. This was done by comparing each facility to a comparative model which established the physical and functional parameters for the school. The comparative models were based on a space allocation concept that has been in use in Stamford for some time. This concept merely requires that there be an equal number of conventional classrooms for each grade division between kindergarten and sixth grade. The models, then, consist of 2 classroom, 3 classroom, and 4 classroom models with capacities of 322, 483, and 644 students, respectively (see Table IV-Four). In addition to the conventional classrooms, each model has certain requirements for auxiliary instructional space and ancillary service space depending on potential enrollment. In many cases, the auxiliary instructional space presently exists, but there are numerous instances where auxiliary space will probably be required to meet long-term educational goals. For example, it is believed that science and math, at the elementary level, will require specialized areas as will future programs

STAMFORD EDUCATIONAL PUBLIC POLICY IMPACT STUDY

Table IV-Four
Basic Organizational Parameters for the Elementary Schools in Stamford

	No. Spaces K	No. 1-6	Total Enrollment
A. 2 class	2	12	322
B. 3 class	3	18	483
C. 4 class	4	24	644
D. 5 class	5	30	805

Note: Need for auxiliary instructional space

Assumptions:

1. Average week divided into 28 instructional time increments of 45 minutes each leaving approximately seven (7) hours for lunch, play, passing, counseling, etc.

2. Need for specialized space will increase, i.e., math, science, computer assisted instruction particularly in Grades 4, 5, and 6.

3. Art facilities should be upgraded to provide opportunities in applied as well as fine arts.

involving Computer Assisted Instruction. In all cases, it was assumed that these specialized needs could be accommodated within the existing buildings without the need for additions. The reassignment of space to these functions, however, will reduce the ultimate capacity of the school to the extent that capacity dictated by the comparative model differs from the present capacity (see Table IV-Five).

- Middle schools and high schools - The evaluation of these facilities followed a process similar to that used for the elementary schools with the exception of the capacity estimate for the building. To project the future capacity, the architectural assessments of 1978 and comments from current school department curriculum specialists were reviewed for the purpose of identifying major deficiencies which would require significant reassignments of space. In some cases, the program needs would not alter capacity, but there were some program areas which are assumed to require small group sizes or are used infrequently and after hours which have the net effect of reducing maximum enrollment.

Fiscal Analysis

Fiscal analysis is an important component of any facility utilization plan. As part of the Stamford Educational Public Policy Impact Study, the fiscal analysis can best be used and understood in conjuction with and consideration of the types of data and analysis contained in the plan. It can be used for three different purposes.

First, it should reflect the magnitude of savings available by closing a building. Second, it should indicate which facilities may be in need of specific types of investment. Finally, the fiscal analysis should provide

STAMFORD EDUCATIONAL PUBLIC POLICY IMPACT STUDY

Table IV-Five

Summary of Comparative Models (Elementary Level)

Conventional Classrooms	2 Class Model	3 Class Model	4 Class Model
Kindergarten	2	3	4
1 - 6	12	18	24
Auxiliary Instruction Space			
Music	1	1	1
Instrument	*	2	3
Fine Arts	1	1	1
Applied Arts	*	1	1
Darkroom	*	1	1
Science	1	1	1
Math	1	1	1
Math CAI	*	1	1
Reading Center	1	1	1
Reading CAI	*	1	1
Gymnasium	*	1	1
Outdoor PE			
Ancillary			
Auditorium	*	*	*
Media Center	1	1	1
Resources			
Pupil Personnel			
Cafeteria	*	*	*
Kitchen			
Staff Lounge			
Administration			
Teacher Prep.			
Main Stor.			
Satellite Stor.			

Integrate with parent or other compatible space
Scaled in proportion to need

the means of comparing the relative efficiency of different structures.

Three different types of indicators were used in this fiscal analysis. These are descriptive indicators, cost indicators, and summative indicators.

Descriptive indicators used. Descriptive indicators are used to provide a context through which cost variables can be better understood. The descriptive indicators used in this analysis were:

- adjusted student capacity as defined and provided by the Stamford Public Schools, Office of Research and Development as of January, 1982 (see Tables IV-Three and IV-Six).
- area of building in square feet as provided by the Stamford Public Schools, Business Office.

Cost indicators used. The cost indicators used are generally fixed costs that are associated with the operation of school buildings. The listing of variables is meant to be both indicative and illustrative, but not exhaustive.

- FY '83 administrative staff costs as specified in the Stamford Public School Budget for FY '83, as reallocated on June 8, 1982. Administrative interns are included in this category (see Tables IV-Six to IV-Eight).
- FY '83 media staff costs as specified in the Stamford Public School Budget for FY '83, as reallocated on June 8, 1982. Media aides are included in this cost category (see Tables IV-Six to IV-Eight).
- FY '83 clerical staff costs as specified in the Stamford Public School Budget for FY '83, as reallocated on June 8, 1982. Clerical aides are included in this category (see Tables IV-Six to IV-Eight).

Table IV-Six

Indicative Potential Savings of Annual Costs
If Elementary School Buildings Are Closed

SCHOOL	Adjusted Student Capacity #	COSTS									SAVINGS			
		FY '83 Administrative Staff $	FY '83 Media Staff $	FY '83 Clerical Staff $	FY '83 Custodial Staff $	FY '82 Heat $	FY '82 Utilities $	FY '83 Security $	FY '82 Water $	FY '82 Telephone $	Total Savings Indicated $	Total Savings Per Student at Adj. Capacity $	Energy Costs Per Student at Adj. Capacity $	Rank
Davenport Ridge	721	105,798	30,802	26,594	79,135	60,220	68,397	1,719	1,040	3,198	376,893	523	178	3
Hart	294	44,003	29,451	13,297	31,654	39,197	7,910	1,389	1,132	2,460	170,493	580	160	11
Murphy	441	82,407	29,451	13,297	55,395	35,441	12,290	2,385	2,146	1,476	234,288	531	108	5
Newfield	524	82,407	29,451	13,297	63,308	50,268	12,997	1,338	1,589	1.968	256,623	489	121	8.5
Northeast	777	105,798	30,802	26,594	94,962	50,793	31,724	1,765	1.146	5,412	348,996	449	106	2.5
Riverbank	487	82,407	29,451	19,357	63,308	34,013	20,945	2, 916	816	2,214	255,427	524	113	7
Rogers	760	105,798	30,802	26,594	94,962	44,738	35,871	3,689	2,218	1,968	346,640	456	106	2.5
Roxbury	483	105,798	29,451	19,357	79,135	37,020	13,756	1,441	1,155	2,460	289,573	600	105	1
Springdale	542	105,798	30,802	26,594	71.222	37,020	23,761	2,939	1,015	3,138	302,289	557	112	6

Table IV-Six (cont.)

Indicative Potential Savings of Annual Costs if Elementary Buildings Are Closed

SCHOOL	Adjusted Student Capacity #	COSTS									SAVINGS			
		FY '83 $ Administrative Staff	FY '83 $ Media Staff	FY '83 Clerical Staff $	FY '83 $ Custodial Staff	FY '82 $ Heat	FY '82 $ Utilities	FY '83 $ Security	FY '82 $ Water	FY '82 $ Telephone	Total $ Savings Indicated	Total Savings $ Per Student at Adj. Capacity	Energy Costs $ Per Student at Adj. Capacity	Rank
Stark	565	105,798	29,451	26,594	71,222	49,101	11,592	2,167	2,235	2,460	300,620	531	107	4
Still-meadow	717	115,398	30,802	26,594	79,135	47,257	46,349	1,686	1,732	3,198	352,151	491	130	10
Toquam	560	105,798	29,451	26,594	94,962	41,783	25,866	2,417	1,732	2,706	331,309	591	121	8.5
Westover	437	82,407	29,451	26,594	63,308	55,197	17,644	2,164	1,801	1,968	280,524	642	167	12
STAMFORD	7,308	1,229,615	389,618	291,357	941,708	582,038	329,092	28,015	19,757	34,626	3,845,826	526	125	-

Table IV-Seven

Indicative Potential Savings of Annual Costs

If Middle School Buildings Are Closed

SCHOOL	Adjusted Student Capacity #	COSTS									SAVINGS			
		FY '83 Administrative Staff $	FY '83 Media Staff $	FY '83 Clerical Staff $	FY '83 Custodial Staff $	FY '82 Heat $	FY '82 Utilities $	FY '83 Security $	FY '82 Water $	FY '82 Telephone $	Total Savings Indicated $	Total Savings Per Student at Adj. Capacity $	Energy Costs Per Student at Adj. Capacity $	Rank
Cloonan	894	159,215	35,511	45,951	126,616	66,478	76,462	2,092	1,392	3,936	517,693	579	160	2
Dolan	652	120,811	29,451	26,594	94,962	54,668	13,304	2,330	1,263	3,936	347,319	532	104	1
TOR	705	120,811	29,451	32,654	110,789	80, 344	47,442	2,092	2,316	3,198	429,097	608	181	3
STAMFORD	2,251	400,837	94,413	105,199	332,367	201,490	137,208	6,514	4,971	11,070	1,294,069	575	150	-

Table IV-Eight
Indicative Potential Savings of Annual Costs

If High School Buildings Are Closed

SCHOOL	Adjusted Student Capacity #	COSTS									SAVINGS			
		FY '83 Administrative Staff $	FY '83 Media Staff $	FY '83 Clerical Staff $	FY '83 Custodial Staff $	FY '82 Heat $	FY '82 Utilities $	FY '83 Security $	FY '82 Water $	FY '82 Telephone $	Total Savings Indicated $	Total Savings Per Student at Adj. Capacity $	Energy Costs Per Student at Adj. Capacity $	Rank
Rippowam	1,731	211,659	53,948	70,610	135,076	191,103	100,889	3,349	4,111	11,070	783,546	453	169	2
Stamford	2,466	250,063	75,468	119,673	252,175	147,631	140,057	3,465	3,986	11,808	1,006,792	409	117	1
Westhill	2,759	250,063	75,468	131,595	251,117	193,522	223,554	6,005	4,238	8,610	1,146,931	416	151	3
STAMFORD	6,956	711,785	204,884	321,878	638,368	532,256	464,500	12,819	12,335	31,488	2,937,269	422	143	-

- FY '83 custodial staff costs as specified in the Stamford Public Schools Budget for FY '83, as reallocated on June 8, 1982 (see Tables IV-Six to IV-Eight).
- FY '82 heating costs as specified in an analysis of expenditures prepared by the Stamford Public Schools, Business Office (see Tables IV-Six to IV-Eight).
- FY '82 utility costs as specified in an analysis of expenditures prepared by the Stamford Public Schools, Business Office. These figures include no costs for heat (see Tables IV-Six to IV-Eight).
- FY '83 security costs are based on an analysis of the contracts between the Stamford Public Schools and the Sonitrol and Amsafe Companies (see Tables IV-Six to IV-Eight).
- FY '82 water costs are based on data provided by the Stamford Public Schools, Business Office (see Tables IV-Six to IV-Eight).
- FY '82 telephone costs are based on data provided by the Stamford Public Schools, Superintendent's Office. The costs shown are only for instruments and local service ($20.50/monthly telephone). Long distance charges were not available on an individual school basis (see Tables IV-Six to IV-Eight).

Summative indicators used. Summative variables allow for better analysis than individual variables because they provide a more comprehensive basis for comparison.

- Total savings indicated is the sum of all cost variables (see Tables IV-Six to IV-Eight).
- Total savings per student at adjusted capacity is equal to the Total Savings divided by the Adjusted Student Capacity (see Tables IV-Six to IV-Eight).

Energy costs per student at adjusted capacity is equal to the FY '82 Heating Costs plus the FY '82 Utility Costs divided by the Adjusted Student Capacity (see Tables IV-Six to IV-Eight).

Total costs is equal to the sum of all cost variables listed (see Table IV-Nine).

Energy costs per square foot is equal to the FY '82 Heating Costs plus the FY '82 Utility Costs divided by the Area of the Building (see Table IV-Nine).

Analysis. A fiscal analysis of the facilities at the elementary, middle, and high school levels, utilizing the indicators described above, yielded the following results. Closing an elementary school in Stamford would provide an average annual savings of about $295,800. Closing the Davenport Ridge would provide the most savings at $386,893. Closing the Hart would provide the least savings, $170,493.

The average fixed costs of the Stamford elementary schools would be about $526 per student if they were all operating at capacity. Northeast would be the most efficient elementary school with an annual fixed cost of $449/student. Westover would be the least efficient elementary school, in large part due to high energy expenses, with annual fixed costs of $642/pupil.

The Davenport, Westover, and Hart elementary schools have extraordinarily high energy costs. At maximum capacity their per pupil cost would be 42 percent; 34 percent; and 28 percent higher than the total average per pupil energy expense.

Closing a middle school would provide an annual average savings of $431,400. Closing Cloonan would save $517,653. Closing Turn of the River would save $429,097, and closing Dolan would save $347,319.

The average fixed costs of the Stamford middle schools would be about $575 per pupil if they were all operating at capacity. Dolan would be the most

Table IV-Nine

Comparative Costs of Operating
The Belltown, Burdick, and Rippowam School
Buildings

Building Name	Area of Building (sq. ft.)	FY '82 Heating Costs $	FY '82 Utility Costs $	FY '83 Security Costs $	Total Costs $	Energy Costs Per Square Foot $
Belltown	22,400	14,326	8,707	977	24,010	103
Burdick	89,400	48,618	12,669	2,344	63,631	69
Rippowam	227,700	191,103	100,804	2,449	294,356	128

efficient at $532 per pupil. Cloonan would cost $579 per pupil, and Turn of the River would be the highest at $608 per pupil.

The relative total efficiency of each school, as noted above, reflects their rankings regarding energy costs as well. Dolan's energy costs are 30 percent below the middle school per pupil average, while Turn of the River's are about 21 percent above the mean.

There has been some discussion of possible consolidation of certain School Department functions and placing them in Rippowam High School. In making such a decision many factors must be taken into account, including the comparative costs of operating the buildings.

The energy cost of Rippowam High School seems to be much higher than the same cost for either Belltown or Burdick. The energy costs per square foot at Rippowam are nearly twice that of Burdick and about 25 percent higher than Belltown.

It is unclear how much of the difference in energy costs may be attributable to the differences in the uses of the buildings last year. Clearly, the least energy efficient spaces in Rippowam would likely be closed off if it were to be used for primarily administrative and limited pedagogical purposes.

In using the financial measures, it must be stated that operating cost is but one of many criteria to be used in determining which schools to close. Many expected savings may prove to be illusory. Furthermore, there may be additional costs entailed in closing a particular facility like the need to transport additional students. Facilities planning must be carefully coordinated with the student assignment process to ensure that schools are utilized to their maximum physical potential and adjusted student capacity. Such assignment procedures will increase fiscal efficiency. The relative

total efficiency of schools is closely related to their energy efficiency. Capital expenditure should be made, when practicable, to lower this type of operating cost in otherwise sound and efficient structures.

Savings in operating costs should only be used as a secondary criteria in determining which school building ought to be closed. A wrong choice could negatively impact operating efficiency far more than any of the cost variables herein discussed.

The least efficient elementary school, if all schools were operating at maximum capacity, would have a fixed cost per pupil of $116 more per year than the average elementary school. This figure represents only 3.3 percent of the average total annual cost of a Stamford public school education.

Social Trends

Social trends have been examined in Volume II. Table IV-Ten is a summary of selected indicators ranked by neighborhood for 1970-1980. The indicators were ranked individually from 1 to 11 so as to provide a numerical picture of the neighborhoods. This ranking was used to correlate the quality of life of the neighborhood with a measure of school facility environment. It is also a useful technique to assist in student assignments when distance from school is included.

The indicators selected were population and housing. In terms of population, the data collected were:

- population by neighborhood as percent of city's population
- percent of black residents
- percent of residents of Spanish origin
- percent of persons less than 20 years old
- percent of persons 65 years and older
- percent divorced persons

Table II-Ten

SELECTED INDICATORS RANKED BY NEIGHBORHOOD, 1980

Neighborhoods	Population							Education				Housing						Economic
	Population by neighborhood (% of Stamford)	Percent Black	Percent Spanish Origin	Percent of Persons less than 20 years	Percent of Persons 20-64 years	Percent of Persons 65 years and over	Percent Divorced Persons (over 15 years)	Percent of School Age Population to Neighborhood Total	Percent of School Age Population to Stamford Total	Percent High School Graduates	Percent College Graduates	Percent Substandard Houses to Total Occupied Units	Percent Substandard Houses to Total Substandard Units in Stamford	Percent Condominium Units to Total Stamford Condominium Units	Percent Owner Occupied	Percent Renter Occupied	Percent Black Owners	Percent Black Renter	Percent of Families Under the Poverty Level
Mid-City	1	4	4	11	5	1	1	11	2	7	6	3	1	2	9	3	4	4	5
Glenbrook	3	5	6	10	2	2	3	10	4	5	5	6	4	1	6	6	6	5	6
East Side Cove	4	6	5	3	9	3	4	9	5	8	8	5	3	4	7	5	5	6	4
Springdale	7	7	7	9	11	4	7	8	9	6	7	8	7	3	5	7	7	8	7
No. Stamford	2	8	9	6	4	10	10	3	1	1	1	9	9	-	1	9	8	10	8
Westside	5	3	3	4	7	5	2	5	3	9	10	2	2	5	10	2	3	1	3
Shippan	11	10	8	5	6	6	6	4	11	2	2	7	8	-	4	8	11	7	-
Waterside	9	1	2	1	10	11	5	1	7	10	9	4	5	6[b]	8	4	2	1	1
Westover Road	6	11	11	7	3	7	9	6	6	3	3	10	10	-	2	10	-	-	10
Turn of the River	8	9	10	8	1	8	11	7	8	4	4	11	11	-	1	11	9	9	9
South End	10	2	1	2	8	9	8	2	10	11	11	1	6	6[b]	11	1	1	2	2

Source: U.S. Department of Commerce, Bureau of the Census, 1980 Census of Population (Washington, D.C.: U.S. Department of Commerce, Bureau of the Census, 1981).

Notes: [a]A ranking of 1 is the highest, 11, the lowest.

[b]Represents an equal ranking

- percent of total school age population to neighborhood total
- percent of school age population to Stamford total
- percent of high school graduates
- percent of college graduates

In terms of housing, the data collected were:

- percent of substandard houses to total occupied units
- percent of substandard houses to total substandard units in Stamford
- percent condominium units to total Stamford condominium units
- percent owner occupied
- percent black owners
- percent black renters
- percent of families under the poverty level

The neighborhoods can be grouped together through an assessment of their social and physical policy trends. Those with the highest social/physical needs are: South End, West Side, and Waterside; those with the least physical social needs are North Stamford, Shippan, Westover, and Turn of the River/ Newfield. Those exhibiting a moderate social/physical need are, in order, East Side-Cove, Mid-City, Glenbrook, and Springdale. These groups are ranked from the highest need, #1; to the moderate need, #2; to the lowest need, #3.

Summary

The decision matrix (see Tables IV-Eleven to IV-Thirteen) summarizes the critical decision criteria for the determination of a facilities strategy. It is organized by grade level, neighborhood, and school location and presents the three major decision criteria categories: demographic, physical facilities, fiscal analyses, and disaggregates one other neighborhood indicator, social trends. Included within the physical facilities category is the indicator of proximate land use to the facility. The matrices provide the information upon which the decisions for policy recommendations will be made.

STAMFORD EDUCATIONAL PUBLIC POLICY IMPACT STUDY

Table IV-Eleven

DECISION CRITERIA FOR POLICY ANALYSIS
Elementary Schools

		DEMOGRAPHIC									PHYSICAL FACILITIES						FISCAL				SOCIAL TRENDS
		School Age Population																			
Neighborhood Study Area	Elementary School	Of Total Population		School Age Size, 1981	School Age in Public Schools		Minorities (School age)		School Age Size Change, 1980 - 1990		Need, 1990	Constructed, Renovated	Capacity	Enrollment	Capital Need	Potential Community Use	Conversion to Other Use	Total Savings	Total Savings/ Student	Energy Cost/ Student (adj. capacity)	Energy Costs	Social Trends
		%	Rank	Rank	%	Rank	%	Rank	%	Rank	Rank	Date	1982	1982	Rank	Index	Index	$	$	$	Rank	Rank
Mid-City	Hart	14.1	11	2	76.0	9	32.9	4	-3.6	2	1	1915, 1962	484	362	10	26	6	170,493	580	160	11	2
Glenbrook	Stark	18.2	10	3	83.2	3	25.3	5	-15.3	5	5	1927, 1953,'70	551	526	7	29	4	300,620	531	107	4	2
East Side-Cove	Rogers	19.1	9	5	80.4	5	20.6	6	-16.5	6	7	1889, 1904,15,27 '62,64,74	667	623	13	27	9	346,640	456	106	2.5	2
	Murphy	19.1	9	5	80.4	5	20.6	6	-16.5	6	7	1900, '22,56	464	479	6	23	5	234,288	531	108	5	2
Shippan	0	27.2	3	11	67.9	11	3.9	11	-50.0	10	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3
South End	0	28.0	2	10	86.9	1	74.1	2	-1.8	1	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1
Waterside	0	32.5	1	7	83.9	2	78.1	1	-12.9	4	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1
West Side	Westover	25.2	5	4	78.9	7	63.3	3	-8.8	3	3	1955	383	364	1	31	11	280,524	642	167	12	1
Westover	Roxbury	23.8	6	6	78.4	8	4.6	7	-46.0	8	10	1959, '64	537	440	2	30	9	289,573	600	105	1	3
	Stillmeadow	23.8	6	6	78.4	8	4.6	7	-46.0	8		1972	777	742	9	25	4	352,151	491	130	10	3

Table IV-Eleven (cont.)

Decision Criteria for Policy Analysis - Elementary Schools

		DEMOGRAPHIC									PHYSICAL FACILITIES						FISCAL				SOCIAL TRENDS
		School Age Population																			
Neighborhood Study Area	Elementary School	Of Total Population		School Age Size, 1981	School Age in Public Schools		Minorities (School Age)		School Age Size Change, 1980 - 1990		Need, 1990	Constructed, Renovated	Capacity	Enrollment	Capital Need	Potential Community Use	Conversion to Other Use	Total Savings	Total Savings/ Student	Energy Cost/ Student (adj. capacity)	Energy Costs	Social Trends
		%	Rank	Rank	%	Rank	%	Rank	%	Rank	Rank	Date	1982	1982	Rank	Index	Index	$	$	$	Rank	Rank
TOR/ Newfield	Davenport	23.3	7	8	79.6	6	4.1	9.5	-46.6	9	11	1972	684	646	11	29	10	376,893	523	178	13	3
	Newfield	23.3	7	8	79.6	6	4.1	9.5	-46.6	9	11	1954	524	208	5	29	8	256,623	489	121	8.[illegible]	3
Springdale	Toquam	19.6	8	9	81.7	4	4.3	8	-30.0	7	8	1967	643	600	8	18	6	331,309	591	121	8.[illegible]	2
	Springdale	19.6	8	9	81.7	4	4.3	8	-30.0	7	8	1919, '20, '56	551	491	4	27	3	302,289	557	112	6	2
North Stamford	Riverbank	26.5	4	1	68.2	10	4.1	9.5	-50.2	11	9	1962	418	374	12	22	2	255,427	524	113	7	3
	Northeast	26.5	4	1	68.2	10	4.1	9.5	-50.2	11	9	1966	772	611	3	29	8	348,996	449	106	2.[illegible]	3

STAMFORD EDUCATIONAL PUBLIC POLICY IMPACT STUDY

Table IV-Twelve

DECISION CRITERIA FOR POLICY ANALYSIS
Middle Schools

		DEMOGRAPHIC									PHYSICAL FACILITIES						FISCAL				SOCIAL TRENDS
		School Age Population																			
Neighborhood Study Area	Middle School	Of Total Population		School Age Size, 1981	School Age in Public Schools		Minorities (School Age)		School Age Size Change, 1980 - 1990		Need, 1990	Constructed, Renovated	Capacity	Enrollment	Capital Need	Potential Community Use	Conversion to Other Use	Total Savings	Total Savings/ Student	Energy Cost/ Student (adj. capacity)	Energy Costs	Social Trends
		%	Rank	Rank	%	Rank	%	Rank	%	Rank	Rank	Date	1982	1982	Rank	Index	Index	$	$	$	Rank	Rank
Mid-City	Cloonan	14.1	11	2	77.5	5	32.9	4	-3.6	2	NA	1967	868	792	2	42	14	517,653	579	160	2	2
TOR/ Newfield	TOR	23.3	7	8	66.7	8	4.1	10	-46.6	9	NA	1963	730	648	1	34	9	347,319	603	181	3	3
Springdale	Dolan	19.6	8	9	75.3	6	4.3	8	-30.0	7	NA	1949	692	630	3	32	5	429,097	532	104	1	2

STAMFORD EDUCATIONAL PUBLIC POLICY IMPACT STUDY

Table IV-Thirteen

DECISION CRITERIA FOR POLICY ANALYSIS
High Schools

		DEMOGRAPHIC								PHYSICAL FACILITIES						FISCAL				SOCIAL TRENDS
		School Age Population																		
Neighborhood Study Area	High School	Of Total Population		School Age Size, 1981	School Age in Public Schools		Minorities (School Age)		School Age Size Change, 1980 - 1990		Need, 1990	Constructed, Renovated	Capacity	Enrollment	Capital Need	Potential Community Use	Conversion to Other Use	Total Savings	Total Savings/ Student	Energy Cost/ Student (adj. capacity)	Energy Costs	Social Trends
		%	Rank	Rank	%	Rank	%	Rank	%	Rank	Rank	Date	1982	1982	Rank	Index	Index	$	$	$	Rank	Rank
TOR/ Newfield	Rippowam	23.3	7	8	61.3	9	4.1	10	-46.6	9	NA	1961	1,384	745	2	41	15					3
Glenbrook	Stamford	18.2	10	3	68.6	5	25.3	5	-15.3	5	NA	1928, 1967	1,984	1,523	3	45	17					2
Westover	Westhill	23.8	6	6	72.9	2	4.6	7	-46.0	9	NA	1971	2,215	1,966	1	46	16					3

Data Sources for Decision Criteria for Policy Analysis in Tables IV-Eleven to IV-Thirteen

Decision Criteria	Source
1. Percent of school age population (5-19) of total population in 1980. Percent and rank	1. U.S. Census of Population, 1980; the neighborhood with the highest percent of children was ranked as #1, the neighborhood with the lowest, #11.
2. Size of school age population Rank	2. U.S. Census of Population, 1980; the neighborhood with the highest number of children was ranked as #1, the neighborhood with the lowest, #11.
3. Percent of school age population in public school. Percent and rank	3. School Age Population, 1981-1982, Stamford School Department Research and Development, 1982 and Stamford Study Team Analysis, August, 1982.
4. Percent of minority of school age population Percent and rank	4. School Age Population, U.S. Census of Population, 1980; Stamford Study Team Projections, July 15, 1982. Rank #1 is neighborhood with highest percentage of minority of school age population.
5. Percent change in school age population, 1980-1990. Percent and rank	5. Stamford Study Team Projections, July 15, 1982. The neighborhood with the smallest decline is ranked #1, while the neighborhood with the greatest decline is ranked #11.
6. Rank of need, 1990. Ranked for elementary level only	6. Needs Analysis by Neighborhood based on Assumption Two (same percentage of students will attend public schools in 1990 as in the year 1982). Stamford Study Team Analysis, August, 1982. On the elementary school level only, the neighborhood with the greatest demand (seat deficit) was ranked #1, the neighborhood with the least demand (surplus of seats) was ranked #11.
7. School buildings construction and renovation dates.	7. Stamford School Department Research and Development, Facility Reports, 1978.
8. 1982 capacity.	8. Stamford School Department Research and Development, October 15, 1982.

Data Sources for Decision Criteria for Policy Analysis in Tables IV-Eleven to IV-Thirteen

Decision Criteria	Source
9. 1982 enrollment.	9. Stamford School Department Research and Development, October 1, 1982 Attendance.
10. Long term capital need.	10. Stamford Study Team, Facilities Analysis, October, 1982. Ranked from most expensive to least expensive.
11. Potential community use index.	11. Stamford Study Team, Facilities Analysis, October, 1982. Number out of a possible 60 points.
12. Conversion to other use index.	12. Stamford Study Team, Facilities Analysis, 1982. Number out of a possible 48.
13. Total savings.	13. Stamford Study Team, Fiscal Analysis, sum of all costs data from Stamford Public Schools, Business Office and Research and Development.
14. Total savings per pupil at adjusted capacity.	14. Stamford Study Team, Fiscal Analysis, total savings divided by Adjusted Student Capacity. Data from Stamford Public Schools Business Office and Research and Development.
15. Energy costs per student at adjusted capacity.	15. Stamford Study Team, Fiscal Analysis, FY '82 heating costs and FY '82 utility costs divided by Adjusted Student Capacity. Data from Stamford Public Schools Business Office and Research and Development.
16. Energy cost by rank.	16. Stamford Study Team, Fiscal Analysis, energy cost ranked school with highest cost is ranked #13 and lowest is #1.
17. Social trends.	17. U.S. Census of Population, 1970-1980, Stamford Team, Social Policy Environment Analysis, June 30, 1982. Categories of need: #1 is highest need and #3 is lowest need by clustering variables.

V. POLICY RECOMMENDATIONS

The Stamford Facilities Utilization Plan has examined the demand for schooling in public schools and the current supply for meeting that demand. It has projected the demand to 1990 and 2000 by age and race, and aggregated the numbers to fit the grade organization, K-6, 7-8, 9-12. Then, making a series of three assumptions about the proportion of school age Stamford children to attend the public schools, it measured the future need for schools by comparing the specific demand against the current nominal capacity by each school and within each neighborhood. This showed the spatial distribution of the need as well as its numerical dimension. In light of this needs assessment, each school was examined for a response to the policy question: Should this school be strengthened or phased out? This analysis utilized all of the information developed during the comprehensive planning process of the Study Team and the Stamford Educational Planning Committee in a set of summary indicator categories: demographic, physical, fiscal, and social trends.

Demand, Supply, and the Needs Assessment

The potential total school age population in 1990 in public elementary, middle, and high schools varies according to the assumptions made about the nature of the public school enrollment. Three assumptions were stated: Assumption One - that all Stamford children, ages 5-17, would attend public school in 1990 and 2000; Assumption Two - that the same proportion of children, ages 5-17, who currently attend public school will continue to do so in 1990 and 2000; and Assumption Three - that the same number of children, ages 5-17, will attend private schools in 1981-1982 will continue to attend private schools in 1990 and 2000.

Projected School Enrollment in 1990 Based on Assumptions One, Two, and Three

Grade Levels	Assumption One	Assumption Two	Assumption Three
K-6	8,233	6,502	6,410
7-8	1,952	1,458	1,183
9-12	4,174	2,798	1,851

Projected School Enrollment in 2000 Based on Assumptions One, Two, and Three

Grade Levels	Assumption One	Assumption Two	Assumption Three
K-6	7,436	5,876	5,613
7-8	2,182	1,691	1,413
9-12	4,478	3,091	2,155

An assessment of these three forecast assumptions within the context of the social and physical policy analysis of Stamford and its neighborhoods indicates that Assumption Two is the appropriate assumption for projecting demand for schooling.

Therefore, the demand analysis presented these findings:

Projected Demands at All Levels in 1990 and 2000 Based on Assumption Two

Year	K-6	7-8	9-12
1990	+ 906	+793	+2,765/+1,381[a]
2000	+1,532	+600	+2,545/+1,161[a]

Note: [a]Total with Rippowam open/Rippowam closed

Findings

This analysis indicates that, given an optimum elementary school size of 400-600 capacity, as discussed in the last chapter, at least one and probably two elementary schools should be closed in a phased out implementation process between 1985 and 1995, concurrent with the strengthening of the nine remaining elementary schools. In the middle school situation, the needs assessment shows that the number of middle school students will be rising by the year 2000; therefore, given an optimum capacity of 600-800, one middle school should be phased out between 1985 and 1995, concurrent with strengthening the two remaining schools. For the comprehensive high schools, with the phasing out of Rippowam as a comprehensive high school, the two remaining high schools, Stamford and Westhill, must be renovated in accordance with the curriculum's academic objectives.

Status of Schools: Present and Projected

SCHOOL LEVEL	1982	Strengthen 1985	Phase Out 1995
Elementary	13	11-12[b]	1-2
Middle	3	2	1
High School	3	2	1

Curriculum development. Although the program development phase of the comprehensive planning process has just been initiated, there are some early indications from the analysis of issues and concerns, community goals, and student need in the earlier planning process which will assist in a preliminary

[b]These figures do not include the two proposed magnet elementary schools.

way to indicate a direction for the curriculum development component.

In the elementary schools, there was a sense of continuation and enhancement of current programs with a continued emphasis on basic skills and an expanded use of computers. There should be an additional dimension given to the world of work. Moreover, there should be an expansion of such educational support programs as all day kindergartens and supervised after school programs. To compete in today's public/private school market, public schools must enhance the positive aspects of the elementary schools and initiate other complimentary programs. Emphasizing this will attract both those interested in a range of programs for the intellectually gifted child, those whose concerns are for basic education, and those who need one of the special education programs.

In the middle schools, there was a sense that the COGs should be continued and that an emphasis on humanities and career exploration should be encouraged. There was also a sense that the counseling and guidance aspect could be strengthened. There was a perceived need for new initiatives to respond to slow learners, the average child, and the highly gifted. The middle schools are viewed as potential trouble spots for early adolescence. In terms of learning, there is a need for a sustaining and nurturing environment which will provide a bridge to secondary education.

In the high schools, there was a sense that the comprehensive high school curriculum needs to be examined in depth; that while continuing as a comprehensive high school, the large school should be reorganized as a school within a school or a house plan. Moreover, the curriculum needs to respond to the fundamental economic shifts in society and identify encompassing curriculum themes for students in college preparatory as well as those not

continuing their formal education.

Prior to a final decision about the closing of these schools, a continuous monitoring of the decision criteria needs to be undertaken. The key element of any comprehensive school facilities utilization plan has not yet been concluded by the Stamford School Department; that is, the design of the curriculum and educational programs for the school system. Without the curriculum design it is impossible to determine which specific schools should be phased out. This is particularly significant for the secondary schools since the curriculum development phase is focusing on this level of education.

The goals of the curriculum development phase could include:

- to provide a strong academic education which will enable each student, upon graduation, to pursue either higher education or meaningful employment or both;
- to provide each student with an awareness of the opportunities available in the world of work and in the cultural community, and the knowledge and skills necessary to take advantage of these opportunities;
- to develop the specific knowledge and skills required for students' entry into a specific area of the world of work within the community;
- to provide each graduate with an education needed to establish and maintain a level of personal dignity; to function successfully as a citizen, family member, parent, worker, and consumer.

The central purpose of these new educational programs is to provide instructional programs geared to the students' academic, career, and personal needs. The basic elements of such a curriculum could be: interdisciplinary curriculum development across academic and special interest areas; a strong

academic core; a pre-technical and technical core; a delineation of special school requirements; an exploratory program in an area of validated student interest and need; a pervasive career oriented focus; and a wide choice of interdisciplinary electives.

Such themes could be health sciences, performing arts, high tech, and business - public and private sector management. It is further suggested that consideration be given to the development of an 11-14 year school, at Rippowam, which would be geared to both college and noncollege bound students providing skills for significant post-secondary employment. The student would obtain a high school diploma along with a certificate of advanced standing. The school would be developed in collaboration with a community college. It could quickly be made self-sustaining. This approach will meet the needs of those students at all levels of skill and learning.

Policy options for strengthening and phasing out of facilities. The educational goals and policy assumptions will determine the identification of alternative policy options. These goals are to maximize cost-effective, desegregated, quality education in an optimum learning environment; and to prepare students to function successfully as citizens, family members, parents, workers, and consumers.

The twelve policy assumptions include:

- reasonable and equitable racial balance
- academic balance and feeder pattern continuity
- student access to an appropriate educational program
- safe, sound, and environmentally fit facilities
- adequate space and resources for advanced curriculum
- provision for orderly and timely reduction of surplus capacity
- maximization of quality educational experience

- provision of services to meet the needs of all students in the school system, reduction of out-of-school system placement
- minimization of student disruption by continuity through the grades in the same school
- minimization of social/neighborhood disruption
- preservation of neighborhood orientation
- provision of equitable distribution and cost efficient transportation

The decision matrix criteria for policy analysis displays the major critical decision elements: demographic, physical facilities, fiscal, and social trends. In identifying the possible policy options, the issues to which the policy options respond include declining enrollment, which shows, however, an increase after 1990; an unequal spatial distribution of the school age population in the city; current disinvestment in the capital and operating budgets of the schools; financial retrenchment by the municipal government; a loss of public support for education and a fundamental shift in the economy and the social conditions of Stamford.

The first decision criterion by which the schools should be measured for strengthening or phasing out is demographic: How many students will there be in 1990 and where will they be living? There will be about 2,000 elementary public school children and they will be living in the neighborhoods clustered around the turnpike, i.e., East Side-Cove, South End, West Side, and Waterside; they will also be living in North Stamford and possibly Westover; few will be located in Turn of the River/Newfield, Springdale, and Glenbrook. Given this distribution and the need that one, and possibly two, elementary schools should be closed on the northern side of the city, the schools to consider should be: Murphy, Rogers, Stark, Toquam, Springdale, Davenport Ridge, and Northeast.

There will be 1,500 middle school children and they will be living in this same band of neighborhoods, given the upturn in the middle school years between 1990 and 2000.

The public high school population will be about 3,000 in 1990; with Rippowam phased out as a comprehensive high school, both Stamford and Westhill should be maintained and strengthened. It is recommended that Rippowam be maintained, as below, and that the curriculum development study examine its potential for an innovative curriculum initiative.

However, it is the recommendation of the Study Team that Rippowam be recycled. There are two buildings used for educational activities which should be closed and their functions transferred to Rippowam, Burdick, and Belltown. The closing of these buildings will mean immediate cost savings of almost $90,000 in operational costs, such as heat, utilities, and security. It does not include any consolidation of function which might take place in transferring to Rippowam.

The second decision criterion is physical facilities. Embodied in this criterion is a comparison of physical facilities with a model of an optimum learning environment. This learning environment has been developed in a preliminary way in the previous chapter and the facilities measured against it; the model needs to be validated by the curriculum development study currently being undertaken. In utilizing the decision matrix, some key indicators in determining which elementary schools to close should be a combination of the flexibility of a facility's interior and exterior space to house new curriculum programs, the building's potential for community use, and the year of its construction and renovation.

The third decision criterion is fiscal measures. This set of criteria

has been clearly explained in the previous chapter. The analysis, however, must be considered in conjunction with other critical decision elements.

Summary: Policy Options

- Between 1983 and 1995, at least one, and probably two, elementary schools should be phased out concurrent with the strengthening of the remaining schools. If the population projections under the occupancy model become a reality and market forces and present housing policies prevail, it may be possible to phase out three additional elementary schools by the year 2000.
- Between 1985 and 1995, one middle school should be phased out concurrent with the strengthening of the remaining schools.
- Stamford and Westhill High Schools should be retained as comprehensive high schools. The Rippowam facility should be closed as a comprehensive high school and recycled to provide space for: (1) programs designed to develop significant post-secondary employment skills for college and noncollege bound students; (2) programs currently housed at Burdick; and (3) offices currently housed at Belltown.
- Close Burdick and Belltown and return the buildings to the City.

These recommendations must be considered in context with the curriculum development component of the long range study.

Recommendations

The recommendations of the Study Team are:

1985-1995 Close Burdick and Belltown and transfer their functions to the Rippowam building; complete phasing out of Rippowam as a comprehensive high school and create in collaboration with a community college a special curriculum program with a career focus.

1985-1990	Phase out one elementary school
1986-1990	Phase out one middle school
1988-1990	Assess the need to close a second elementary school
1990	Reassess the need to close a second elementary school
1990	Reassess possible need to close three additional elementary schools

If these recommendations are followed the Stamford School System would consist of:

9 elementary schools

2 middle schools

2 magnet elementary schools

2 comprehensive high schools

1 advanced career preparation center

APPENDIX

APPENDIX A

WORKING PAPERS FOR

STAMFORD EDUCATIONAL PUBLIC POLICY IMPACT STUDY

Preliminary Report, Objectives A and B: Social and Physical Policy Environment (April 30, 1982)

Preliminary Report, Objective C: Client Group Analysis (May 31, 1982)

Preliminary Report, Objective D: National Policy Trends (May 31, 1982)

Final Report, Objectives A and B: Social and Physical Policy Environment (June 30, 1982)

Final Report, Objective C: Client Group Analysis (July 31, 1982)

Final Report, Objective D: National Educational Trends and State and Local Implications (July 31, 1982)

Preliminary Report, Objective E: Issues and Concerns About Stamford Schools (July 31, 1982)

Preliminary Report F: Scenario Analysis (August 31, 1982)

Population Supplement (August 31, 1982)

Final Report, Objective E: Issues and Concerns About Stamford Schools (September 30, 1982)

Final Report, Objective F: Scenario Analysis (October 15, 1982)

Facilities Utilization Plan (November 10, 1982)